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Bad Results of Neglected Middle Ear Suppuration.*

By W. G. Harrison, M. D.,

Birmingham, Ala.

In this hasty contribution no attempt will be made to discuss the etiology, pathology nor symptoms of chronic suppurative otitis, but merely some of the deleterious sequellae of this condition, with a few illustrative cases.

Chronic diseases of passive symptomatology, especially where occurring in young children, are apt to be overlooked or their importance minimized. This is peculiarly true of chronic otitis and all the more so doubtless, because under the old lecture system of instruction it received slight attention, and moreover was not so amenable to treatment as now.

The complications of chronic suppurative middle ear disease are of two grades of severity; the first involves loss of function and seriously impairs comfort.

In this division we would place defective hearing, perforated drum membrane, vertigo, ear polypi and neurasthenia.

In the second and severer grade of complications one would classify those involving greater danger—those which often destroy life, viz:

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cholesteatomatous formations, meningitis, brain abscess, thrombosis and pyemia.

Various authorities estimate that about fifteen per cent of deaf mutism results from neglected chronic suppuration, probably nine-tenths of which could be prevented by proper treatment.

Only when we realize that Alabama has more than a thousand deaf mutes, and the number yearly increasing, are we cognizant of its import. Then again our state is annually paying nearly fifty thousand dollars to educate a small per cent of its deaf. One-sixth or more of this could have been saved by early treatment of affections which later became incurable.

In addition to the real deaf mutes one sees a large number of people with various grades of impaired hearing, which have eventuated from untreated chronic otitis. If the defect be in one ear it may cause slight discomfort—in younger patients may entirely escape notice. Only when the hearing is carefully tested will the slighter grades of defective audition be recognized. Politzer: "It is an established fact that some cases of impaired hearing arising in later years of life result from overlooked or neglected aural affections in childhood." Granting this, we can easily see the wisdom and economy of testing the hearing in the early years of school life. Such a precaution would prevent some total deafness and prevent much poor hearing in adults.

Second. Patients with impaired hearing are often under great mental strain to follow a conversation, and if they have an unstable nervous system this overwork may produce most inveterate neurasthenia.

Mrs. B. had diphtheria several years ago followed by abscesses in each middle ear. At present she hears conversational voice at *three feet* which ought to be easy at twenty. When two people are talking in the room at the same time she finds it difficult to follow either conversation, and the strained effort to hear requires the concentration of all mental powers. Under this tax she has become extremely neurotic and engrafted on the diseased ear is a veritable neurasthenia.

Third. Probably the most frequent evil resulting from neglected otitis is chronic osteomyelitis, and this is a way station on the road to worse conditions. Generally the affection is passive for years and only some intercurrent complication directs the attention to its presence. In

patients with long continued discharge from the middle ear dizziness, slight pain, headache, occasional attacks of nausea or tenderness on deep pressure behind the auricle are sufficient symptoms to arouse serious anxiety. The proper treatment for osteomyelitis here is the same as elsewhere—prompt and thorough removal of all diseased parts.

The following case is in point: H. T. O., white, male, aged nine, had running ear on one side for years. Has adenoids and enlarged tonsils, has a chronic suppurative middle ear disease on right side and when first seen had severe acute painful mastoiditis in the other ear. I was called to treat the acute condition. Palliative measures failing to relieve, operation was advised and the parents reluctantly consented to have both mastoids opened. The acute ear was a simple affair—pus closely confined in bone cells—but the chronic ear was extensively diseased, necroses of the entire mastoid portion with perforations into the subdural space. So far the condition had been passive. A few months and pyaemia leptomeningitis or perchance a brain abscess would have closed the chapter.

Fourth. When the drum remains long perforated and there is a continuous or even intermittent discharge through the external canal the mucous membrane of the latter often proliferates rapidly, grows into and through the perforation, continues to proliferate within the middle ear cavity and slowly, but steadily, forms a concretion, tumor like in shape and appearance, called "cholesteatom." This "pseudo tumor" is sometimes a most serious condition. It is well illustrated by the following case: S. D., white, male, 27 years of age, had a running ear since childhood. Hearing bad, but no other special symptoms till two months previous to my first visit. For eight weeks has had slow, deep seated boring pain over mastoid, some vertigo and general headache. Left external canal is tightly plugged with a mass of polypi.

In this case the outer layer of the mastoid was schlerosed and chiselled away with much difficulty, but beneath was found an oval cavity some inch in diameter invading the cerebral space and containing a mass of cholesteatome. Adjoining this was a subdural abscess containing probably half an ounce of pus, the latter furnishing a bath for the signoid sinus which it almost surrounded.

The drain on general health and the marked tax on resistive power is well illustrated by the following case: Miss P., white, female, age

about twenty-four, had a discharging ear since childhood. Has had no special illness, but subject to frequent colds—especially in the chest. Digestion impaired and the patient is thin, pale, and haemoglobin is below sixty per cent. In this case the patient suffered no pain and was induced to seek operation solely because of the foul smelling discharge which had become a source of annoyance and humiliation. Within four months after scraping out the caes and necrosis the general health improved and she gained some twenty pounds in weight with a haemoglobin percentage of above ninety-five.

Fifth. In most cases where the drainage is unobstructed chronic suppuration in the middle ear presents few active symptoms, but let an enlarging polypus or other obstruction interfere with the drainage and the pain, headache, nausea, somnolence, vertigo and sometimes fever are apt to arise. The middle ear and external canal are frequently the seat of rapidly growing polypi and these are the most usual cases of obstruction. Many illustrative cases are seen by every aurist.

Sixth. A more rare but more dangerous complication than any of the above is acute leptomeningitis. I've seen no case in private practice, but recall several observed in hospital clinics. In each instance the patient walked into the clinic, had no sense of alarm nor anxiety. In one the condition was strongly suspected because of the dizziness, nausea tremor, recurring mild delirium, and more especially because a probe passed into the tympanum easily found its way through a dehiscence about the squamo-petrosal suture, and was felt to impinge on the dura. Operation revealed a spot of localized pachymeningitis smaller than a quarter, but opening the dura the arachnoid and pia showed a film (strongly resembling a spider web) of pus thinly overspreading the exposed cerebrum. A drain was inserted, and this patient recovered,—a result not more gratifying than unusual.

Another case was in a boy of fifteen with ear discharge of ten years standing,—came for relief of headache. Entered the hospital in the afternoon for operation next day. The signs and symptoms pointed strongly to pain from retention of pus. That night he began with violent convulsions and died in two hours. The autopsy showed leptomeningitis extending over most of the cerebrum.

Chronic middle ear disease is the most usual cause of brain ab-

cess. If the infection enters through the tympanic roof, the temporal lobe of the corresponding side will most likely be the seat of the abscess; but if the skull be perforated through the mastoid portion into the posterior fossa, then the cerebellum will suffer. The latter is well illustrated by the following, which, however, did not occur in my practice: T. D., white, male, aged about 15, walked into the hospital with history of a chronic discharge from left ear. It had never caused symptoms, but within a month the patient had suffered several attacks of severe headache and nausea. When first seen he was dizzy (fainted in the reception room) and his sister says he is silly—talks and laughs at random. Pulse is slow, but insists that he is not sick other than headache. He was put to bed for observation and his condition thoroughly studied by internists, nerve, ear and eye specialists for four days. He was operated on, the surgeon finding an abscess the size of a goose egg in the left hemisphere of the cerebellum. In this case the nerve head showed a marked choked disc with some retinal changes beyond, despite of the fact it had been impossible to demonstrate a diminution of visual acuity. In all cases of suspected cerebral disease the ophthalmoscopic study of the eye ground is a valuable adjunct in diagnosis.

Eighth. Probably the most frequent of fatal sequella of chronic suppurative otitis is pyemia. This is to be expected when one remembers that the lateral sinus and jugular bulb are in immediate relation with the mastoid and a large vein from the latter pours its poisoned blood direct into the signoid sinus.

The dangers, complications and nature's final triumph in these cases is well illustrated by the following: A. H., white, female, age 15, had severe scarlatina at ten complicated by acute nephritis, pulmonary abscess and suppurative otitis in each ear. After several months she regained fair health, but notwithstanding she was treated by several specialists, the discharge continued for nearly two years when it stopped, leaving each drum membrane with a large perforation. The latter hiatus was the occasion of the present misfortune. While in swimming patient got water into the ear and that night began a violent acute exacerbation of an old necrosis. Four days later she showed suspicious symptoms of general infection. Dr. Thigpen of Montgomery, was asked to see her and under his direct guidance and supervision the right mastoid was opened, thoroughly cleaned, tympanum and mastoid scraped

out, and all visible dead bone removed. At this time Dr. Thigpen tapped the lateral sinus with a sterile knife and found the contents fluid. The immediate effect of the operation was to relieve all headache, but the fever, sweats, diarrhea and mild jaundice persisted. Four days later, after hearing my unfavorable report of her condition, Dr. Thigpen wired to tap the sinus and if clot was found scrape it out. I'd had no experience with this operation, but attempted it and removed a large clot which extended to and possibly beyond the jugular bulb. The girl was better for several days, but within a week developed metastatic abscesses in one knee joint, one wrist and elbow, one ankle and four finger joints. Some of these were drained by incision. She had another pulmonary abscess near the site of the one following scarlatina six years before. This second abscess later burst into a bronchus and rapidly emptied itself almost strangling the patient. She had all the stimulants and other medicines which seemed indicated. Antistreptococcus serum like the other remedies did no good. The patient simply wore out the disease—overcame the infection, but was left with several joints more or less ankylosed. She subsequently spent eight months under Dr. Michael Hoke in Atlanta, and he succeeded in improving the joint trouble greatly. At present her hearing is fair, her general health good, and while neither gives trouble at present, one still fears the unopened mastoid may develop complications.

In conclusion I would say:

1. Most acute suppurations are probably due to preventable causes like adenoids, neglected colds, etc.
2. Acute suppurating ears can generally be cured if promptly and energetically treated.
3. Cases resulting from grip, diphtheria, measles and scarlatina are more virulent, but even these will generally respond to treatment.
4. Chronic suppurative otitis media is most always secondary to the acute condition, and is amenable to antiseptic therapy in many instances.
5. If medical measure fail, surgical intervention will almost surely save the patient serious complications in after years.
6. Headache, nausea, vertigo, fever, somnolence, tremor and disturbed vision occurring in one with chronic ear disease are always *alarming* symptoms, and are usually an urgent demand for surgical relief.

Acne.*

By J. H. Edmondson, M. D.,

Birmingham, Ala.

Acne is an inflammation of sebaceous glands; the substratum of its numerous varieties being seborrhea.

Puberty ushers the condition in as a rule; the adult occasionally suffers persistency of the disease, but usually between the ages of eighteen and twenty-five the glands seem to regain their normal condition and functionate properly, until the menopause appears.

The sebaceous glands secrete an excessive amount of sebum which is very perceptible; the sebaceous pores being unable to throw off as rapidly as this sebum is formed, a fatty cylinder clogs the channel, distends it and renders it visible. At this stage it generally becomes infected by staphylococci causing an inflammation which either terminates in an abscess—as acne vulgaris or an indurated nodule, which does not suppurate but is slowly absorbed.

Both conditions may exist at the same time, forming acne multiforme. Strumous subjects are more subjected to the pustular variety.

The idea that acne is the manifestation of some constitutional disturbance, is an exaggeration; but intensity and persistency of the disease is brought about by digestive disturbances—stomachial and intestinal; sluggishness of large intestine and consequent constipation. The sexual organs aggravate acne also, but many times when this is supposed to be the case, a more thorough observation will render the etiological factor to be faulty digestion and assimilation.

Knowing, therefore, the prime factors of causation, the proper treatment is derived from three sources: First, constitutional; render the organs of elimination capable of assisting one of their number—the skin—by functioning regularly, and appeal more to nature than in internal medication; out-door exercise, for those of sedentary life often gain what medicine claims, but fails to give to those suffering from chronic constipation. Massage of abdomen, and exercise of abdominal

*Read before Jefferson County Medical Society.

muscles promotes a persistalsis to relieve this condition. In case of intestinal fermentation the mineral acids—also carbolic—answer well, it being my experience to derive greater benefit from the latter. Diet of course is the source of correction for the digestion, and the best results will be derived from the least medication.

Next comes local treatment, and in this patience must exist, for the condition is one of evolution and long duration, consequently restoration must need time.

First, attack the gland; now excessive secretion being the original cause, decrease it, and here the x-ray is indicated, as these rays driven to extreme will cause atrophy of these little organs, and at the same time relieve congestion around the tubes by stimulation. They should not be used to this extent as to date nothing is known of the effect in old age on the skin where these glands fail to secrete. A knowledge can be derived from the amount of sebacious matter on the surface, concerning the condition of the glands.

The next is with the dermal curette; remove the cutical obstructing the channel of the gland, but there is absolutely no necessity in cutting or puncturing the entire skin causing later a scar. The curette is merely used to permit the exudate accumulated to be removed, and the channel is merely occluded by a portion of the skin which if removed will not necessarily cause bleeding. I know some claim that this instrument is used to relieve congestion and promote stimulation, but there are other means by which this may be accomplished—x-ray and application of stimulating lotions and ointments.

Do not squeeze the lesions, for this bruises and necessarily exaggerates. If the accumulation will come out readily, use the dull edge of curette. Comedones may easily be removed by an ejector without bruising if the film is removed from the opening.

Among the drugs used, resorcin, sulphur and salicylic acid are the best for stimulation, accompanied by facial massage—which in itself is an art. Calamine and zinc oxide lotion is an excellent sedative.

One great trouble is the tendency to apply stimulation to an inflamed condition where a sedative is indicated.

Should the Doctors in the Counties of Alabama form Mutual Protective Associations?

By D. L. Wilkinson, M. D.

Montevallo, Ala.

The American Medical Association, to which we all yield allegiance, directs in the code of ethics that "Some general rules should be adopted by the physicians in every town or district relative to the minimum pecuniary acknowledgement from their patients; and it should be deemed an honor to adhere to these rules with as much uniformity as varying circumstances will admit." We all know that this has not been done in Alabama. The following resolution was adopted by the Medical Association of the State of Alabama in 1877 at the Birmingham session: "Whereas, in some localities there may be more than one medical society, or members of the medical profession not members of any society, who are equally interested in the objects for which fee bills are made; therefore, be it ordained by the Medical Association of the State of Alabama, that for county medical societies in this State to undertake, in any way, the regulation of charges for medical services, is unwise and impolitic in itself, and likely to result in some disturbance of the harmonious relations which ought to subsist between the members of the societies and the members of the profession outside of the societies; and this because the regulation of professional charges belongs of right, and from immemorial times, and according to the most natural construction of the code of ethics, to the medical profession as such, and not to special medical organizations." The explanatory remarks by the lamented Cochrane, appended in the book of the rules, are clear cut, comprehensive and powerful. He was undoubtedly correct at the time these remarks were made. We agree with him yet, so far as the advisability of the county societies undertaking this work, but we do not believe that Dr. Cochran, if alive today, would be willing to go on record as opposing the establishment, outside of the societies, of minimum fee bills by districts or communities. To do so would be impolitic for several reasons:

First, we do not believe he would care to oppose Sec. 3, Art. 6, code of ethics of the American Medical Association—Dr. Cochran was alive to the progress of the times.

Second, the action of districts or communities would be beyond his jurisdiction—except possibly in an advisory capacity.

Third, he was thoroughly conversant with the internal condition of affairs among the physicians of the State—he knew their needs, their aspirations, their desires.

The Medical Association of the State of Alabama has made many rapid, forward strides since 1877. Most of the active, legal, progressive doctors of the State are now affiliated with the State organization. The others would be if they could see a way whereby they might further their material interests. "Selfpreservation is the first law of nature," and in material matters doctors are not all entirely unselfish. We, as a profession, can be, and I doubt not, often are too altruistic, too benevolent, too scientific, too ethical for our best financial interests. Most of the laymen will tell you this as well as many doctors. This is one reason why we get ourselves laughed at so much as business men. I do not wish to be misunderstood—I believe in whatever tends to "elevate" and benefit the profession, no matter what that may be. Let us not "strain at a gnat and swallow a camel." May we not entertain lofty ideals, practice altruism, be benovolent, be ethical and at the same time work together to better protect our own interests, that of our families and that of our patients? We can accomplish these desiderata, if we will, by organizing along the line of fee bills and by protecting ourselves against "dead beats." The impossibility of accomplishing anything by individual effort, the "spirit" of the times, the ever-increasing cost of living and maintenance, the necessity for frequent post-graduate work, the multiplicity of doctors, the tendency towards reduction in fees, free hospitals, free dispensaries, free operations, the absence of minimum fee bills—these and many other good, valid, business reasons, seems to me should make a business organization among us imperative. If we organize, we should organize along broad lines, with ample protection afforded the indigent and without restrictions in emergencies. Organization of towns alone is impracticable. The rebate evil, competition, jealousy, the fear of local opinion, and other

reasons, make all efforts in this direction, except in cities, futile. In district organization these objections largely disappear. Here we have the advantage of numbers, a similarity of conditions and needs, local jealousies disappear and opinion is moulded by the fact that the many see and feel the need of better fees and greater protection against the hordes who constantly prey upon the medical profession.

There is no better basis for district organization than the counties, giving to each the right to fix and regulate fees and all other internal matters that may be deemed expedient. Do we need such an organization and do we want it? Letters addressed to all the doctors in Shelby county, some time, ago, whether members or non-members of the Shelby County Medical Society, brought favorable replies from all the doctors in the county except two. Personally interrogating, during the summer, about fifty doctors in the counties of Jefferson, Montgomery, Mobile, Tuscaloosa, Autauga, Chilton, Bibb and Baldwin, nearly all expressed a desire to see some concerted effort made to procure better fees and to eliminate "dead beats." The only questions were: "Is it practicable? Do the doctors want it? Will they co-operate?" Not one said one word about its lowering the professional standard, or about public needs, provided charity cases and emergencies were provided for. If such a step is not needed, why such unanimity of expression? My replies were: The working plan can be made as practical as the working plan of any other organization; 28 of the 30 regular physicians in Shelby county want it—how about you? As to co-operation, a man would be a peculiar sort who would oppose his own interests, that of his family and that of his patients. Any plan is more practical than no plan.

Certainly, the most non-sensical plan, from the material standpoint, is the old common law of England. This law held that medical services were not a "pecuniary debt," but an "honorarium." It must not be forgotten that for the space of some hundred of years this idea prevailed. When the profession first began to fix charges, it was regarded as "transcending the dignity of the profession." Did this step not do us infinite good rather than harm? How many of us could subsist today on honorarii? It is possible, in the days when the barber was the surgeon and the grocer the apothecary; when the physician mixed priesthood, sorcery and superstition with his medicine, that and honor-

arium was, indeed, all he deserved. That time has passed. The physician of today must be a business man. He must not only be well educated, but well equipped. He must keep abreast, if, indeed, he should not lead, the progress of the times. This involves the expenditure of thousands (all his own hard earned money) in observation, study, investigation and travel. Every other pursuit must be sacrificed. He must risk his life and limb, his mind and body, and often the lives of those he loves best. Surely he should be allowed to say to those who can "You must pay me well."

We had as well recognize the fact that principles of commerce, which the lamented Cochran so much dreaded, have crept into the profession. The absence of organization along the lines mentioned is responsible for this. To illustrate this point, I have only to mention contract work, the secret rebating and underbidding that prevails, the division of fees, etc. As the matter now stands the doctor is frequently forced into this false position. He is between Scylla and Charybdis. On the one hand are the giant corporations to dictate prices and on the other are the labor organizations. True, it is a pity to see men "lease their abilities, their ingenuity, their inventiveness, their resources, their ambition, their prospects for a salary," and yet many of us are forced to do it. Merciless necessity, and the fact that if we don't the other fellow will, has led many of us astray.

Inquiring into the condition of affairs among the physicians of the State during the past summer, I wish to record the following facts: Many of the doctors are not making a living. I believe the average income is less than \$1,000.00. Many are making less than skilled artisans or tradesmen. A great deal of internecine strife prevails, brothers warring against brother, counsellors against counsellors. I found one physician making professional visits oftentimes for 50 cents. He said it was better to get 50 cents than nothing. I found two doctors doing obstetrical work for \$5.00. They said it was better for them to do this than to let the work drift into the hands of the "granny women." I found one man, who had built up a large practice by doing the work of certain influential families "gratis." He had certain parties that he hired in this way to sing his praises to every new comer to his town. Very few doctors owning drug stores make any charges for prescrib-

ing—even for gonorrhoea or syphilis. In most localities no charges are made for advice over the 'phone. In many places the same charges are made for day and night work. Most of our country doctors do obstetrical work for \$10.00 whether right at their elbows or ten miles away. They likewise treat gonorrhoea, chancroids, gleet and syphilis for \$1.00 office calls. They charge on an average \$1.00 for all diagnostic work, including vaginal examinations. In fact \$1.00 is about their maximum charge for any and all office work. Many make 50 cents their maximum office charge. I found one doctor acting as drug clerk for a drug store firm in the interim between his professional visits. The condition in Alabama is no worse than in many portions of the U. S. but it only illustrates the point that we need organization to protect our material interests. The life insurance companies were well aware of the status of affairs when they issued their famous edict, but thanks to the organizations already existing, they have about failed in their "bone tossing business." Now it does seem that if we could act concertedly in this matter we ought to be able to regulate other matters of possibly even more importance. The spirit of organization is abroad in the land. Even the farmers have at last gotten together and are preparing to control the entire food supply of more than 80,000,000 people. The negro is so well organized that he dictates his own prices and can not be had except upon his own terms. As a counsellor remarked to me the other day, "No right thinking man can or will deny us the right to organize for purposes of self defense." It is better for the people if they can be taught that the objects of the organization are better equipment of the profession in education, material and position. There is no greater incentive to the physician himself than the receipt of good fees. There is a great increase in the wealth of the country. The doctor is not getting the share to which he is entitled. Ever content to work "pro bono publico," he has forgotten the needs of himself and his family. A dollar is measured by its purchasing power. \$2,000.00 today is the equivalent of \$12 or \$1400 a few years ago. We must not lose sight of this fact. The State grants the physician but few privileges. We have no special lien like the mechanic. We attend court. We are exempt from jury duty, but not from road duty. We pay special taxes in most of the towns and cities to expend our lives in gratuitous work and in preventive work for the public weal in

which all are interested. Our remuneration is "niggardly" and "grudgingly" given when given at all. Concerted action would at least abolish these special taxes.

Will a protective, business association of the doctors in the several counties of Alabama injure in any way the Medical Association of the State of Alabama? We think not, but rather by cementing them together in material, as well as scientific ways, weld them into one great compact, true brotherhood with common aims and ambitions.

We have organized in Shelby county with prospects in the near future of getting all of the regular physicians in the county except a few. If the doctors generally will co-operate with us we will soon be able to bring about a better understanding among ourselves. We will be able to get better fees while amply providing for charity cases and emergencies. We will do away largely with rate cutting. We will regulate contract work and teach the "dead beat" to pay up. It is possible that we have "dreamed a dream," but at present we are working together more harmoniously than ever, and this is worth something if we accomplish no more.

Since writing the above the doctors in Chilton, "with the exception of one scrub," as one of the doctors said, have all gotten together on a minimum fee bill. For any one desirous of trying to organize his own county along similar lines to Shelby, we will send a copy of our constitution, fee bills, and pledge, and in the event that he should fail, we will extend to him the right hand of fellowship and let him join the Shelby county organization.

Sterility in Women.*

By E. M. Robinson, M. D.,

Birmingham, Ala.

Sterility in the female is a pathological condition in all women who have reached puberty and who have not passed the menopause; it is physiological after the menopause and before puberty. It may be produced either by mechanical means or by a diseased condition of the gen-

*Read before Jefferson County Medical Society.

erative organs. Any condition which would prevent the introduction of the penis into the vagina, as atresia, stenosis, etc., will prevent conception. However, an unruptured hymen is not an absolute barrier against conception. A case occurred in the practice of a colleague in which both parties—they were not married—affirmed that copulation had been attempted but one time and the effort was unsuccessful so far as accomplishing an entrance was concerned, the man emitted the semen upon the external genitals of the girl, and an examination five months later showed a hymen intact with conditions showing that it was impossible for the penis to have passed into the vagina, but a five months pregnancy existed.

Uterine fibroids are said to be a barrier to conception, but all who have observed can recall the co-existence of these two conditions. Any of the malpositions may prevent the passage of zoosperms into the uterus or they may render the endometrium so diseased that the ovum will not develop in it. Rupture of the perineum may prevent conception by allowing the semen to flow out of the vagina as soon as the penis is withdrawn. Laceration of the cervix may prevent conception.

Ulcers, vigorous curretting, cauteries, etc., may cause atresia of the uterus, thereby preventing the passage of the spermatozoa into the uterus.

Salpingitis may cause sterility by the discharge washing away the spermatozoa or they may be destroyed by the discharges. In certain conditions of the ovary impregnation is impossible and I have noticed in more than one case where sterility had existed and a cystic ovary or a diseased or distorted tube has been removed from one side leaving a healthy condition upon the opposite side, conception has taken place immediately.

Cystic tumors of the ovary so destroy the ovarian tissue that ovulation is not possible.

Gonorrhoea is said to be the most common cause of sterility among women. The condition is brought about by occluding contorting or folding the tubes or they may be closed by contracting fibrous bands, the fimbriated extremity may become closed or may be drawn entirely out of the neighborhood of the ovary. Pinholes as an infantile uterus constitute barriers to the occurrence of pregnancy. Sterility in prostitutes is due to a chronic inflammation of all the internal generative

organs. Neglected abortions and careless midwifery will produce a condition which will render the victim incapable of impregnation; syphilis causes abortions and may render the woman sterile. Obesity is said to be an important factor in the production of sterility. I believe it is claimed by some that mumps plays some part in the production of this trouble. At just what time with reference to menstruation pregnancy is most likely to occur is not known, but probably soon after the flow has ceased.

Dr. J. R. Goffee says the most frequent causes for the existence of sterility is "infantile uterus and chronic inflammatory conditions of the pelvic organs which has left either purulent material or adhesions that bind down the tubes and ovaries and make it impossible for the ovum to find its way properly into the uterus or for the spermatozoan to reach the ovum under circumstances favorable for fertilization." "Infantile uterus is really a condition of imperfect development that is it remains in the condition that is normal in females before puberty, whereas it was formerly considered an ante flexed condition. J. Marion Sims working upon the theory that it was an ante flexed condition split the cervix posterior lip up to the internal os and made an incision where the cervix and fundus join, inserted a glass plug to remain until healing occurred by granulation. It was abandoned as if no avail. He (Gaffee) says that we know that unless proper development of the uterus occurs at puberty the opportunity for its evolution to the normal size is apt to be missed forever. I think recent treatment of this condition by the stem pessary gives hope that it can be largely overcome. We recall Sims efforts to bring about a condition of pregnancy in a case suffering from etao nrishd etaoi shrdl etaoi shrdlu cmfwyp etaoi shrdluilodarthesm vaganismus, where he put the patient to sleep and where even then it was impossible for entrance to be made with a syringe through the semen into the cervix. I have used the stem pessary or an instrument upon the same principle, made by Outerbridge; it is introduced two weeks before the appearance of the menses and is removed when the flow stops, this acts to correct the displacement, keeps the os open and adds a "stimulus to awaken slumbering tissues." In my practice I have had pregnancy follow its use.

The true cause should be learned and the treatment directed to the

relief of the condition as found in each separate case. The general condition of the patient's health must not be overlooked, proper exercise, gymnastics, etc., malformations and malpositions must be corrected as far as possible.

Lacerations repaired, ulcers treated. Fibroid should be removed by enucleation if possible, this can be done even in a pregnant uterus without necessarily producing harm. Diseased ovaries and tubes are to be removed where other means of treatment will not restore them to a healthy condition.

The Toxic effects of Certain Anilin Derivatives Used in Medical Practice and in Arts with Report of a Case of Acute Paranitranilin Poisoning Ending in Recovery.

By R. Max Goepf, M. D.,

Professor of Clinical Medicine, Philadelphia Polyclinic; Assistant Visiting Physician, Philadelphia General Hospital.

Instances of poisoning with anilin derivatives used as medicinal agents usually acetanilid, have been reported in numbers recently both in the medical, and in the lay press; but it is not perhaps so generally appreciated that certain derivatives of anilin oil, used in the manufacture of paints and dyes, sometimes cause grave accidents among the workmen who are obliged to handle them. When the manufacture of aniline colors and dyes was first begun some forty years ago, it was generally believed that these colors, being derived from a well known poison, anilin, possessed the same poisonous qualities as the parent substance, and numerous cases of poisoning with anilin colors and dyes were reported in the medical literature of the day. According to Weyl,* Sonnenkalb was the first to investigate the effects of the new colors, particularly fuchsin and its congeners, on the animal organism. He found that fuchsin, anilin red and anilin blue were non-poisonous in themselves, but might become poisonous through the pre-

*Read before the Southern Medical Association at Birmingham, Ala.

sence of impurities such as arsenic and mercury, employed in the process of manufacture. In this way he explained Friedrich's case of apparent poisoning in a young man, who was for two months engaged in packing anilin colors, Lyons blue, light blue and fuchsin Nos. 1 and 2. Weyl himself doubts whether this case, which has frequently been quoted, was due at all to the colors in question. Some time later Coupier devised a method of preparing fuchsin with nitrobenzene, without the use of arsenious acid or mercuric oxid. This color was subjected to a searching investigation by Grandhoome and was found to be, when pure, entirely harmless. Statistics compiled by the same authority show that, as regards the percentage of cases of poisoning from occupation, anilin color workers compare very favorably with workmen engaged in other branches of industry in which actual poisons are used or manufactured. Out of a total of 1390 cases of internal affections occurring among anilin workers 6.3 per cent. were cases of poisoning, as compared with 12.5 to 20 per cent. of arsenical poisoning among workmen exposed to arsenic; 10 to 35 per cent. of lead poisoning among glaziers, potters, tin workers and type founders; and 68 per cent. among white lead makers. A few colors of the anilin group, so-called, are poisonous: picric acid and its salts, Martius' yellow, safranin, methylene blue and saffron-substitute (dinitrocresol). Non-poisonous colors, according to Weyl, are naphthol yellow S, and certain azo-colors used for the coloring of wine: orange, ponceau R, purple and solid yellow.

In most countries of Europe the use of anilin colors in the preparation of foods and in the coloring of household articles, toys and the like, is prohibited, either explicitly or practically. Some laws contain lists of forbidden anilin colors and of colors that may be employed. The act of Congress known as "The Food and Drug Act" of 1906 forbids the use of coloring matter, whether in itself harmless or not, if the effect is to conceal damage or inferiority. The use of coloring matter in food products is not prohibited provided the coloring matter is harmless and is not used to conceal inferiority. The coloring of butter and cheese is expressly permitted by special acts, neither of

*Text-Book of Medical Jurisprudence and Toxicology. J. J. Reese. 1906.

which is repealed by the act of 1906. With regard to the kind of colors permitted it is stated that 'harmless vegetable colors may be used for coloring foods and certain of the coal-tar or anilin colors may be used under the conditions and restrictions prescribed by the Secretary of Agriculture.' The latter shall determine from time to time by chemical or other examination the names of those substances which are permitted or prohibited in food products. "Definite rulings on the matter of preservatives and colors have not yet been issued."*

Weyl sums up the question in the following words: "A critical review of the existing literature shows that trustworthy evidence of poisoning by pure anilin colors is not at hand. In all probability the cases in which the color has been suspected have arisen from admixture with arsenical compounds or the use of arsenical mordants." More recent authorities appear to be in accord with this view. Reese (*Medical Jurisprudence and Toxicology**) says: "Anilin colors, under which term are also included numerous artificial colors made from coal-tar derivatives other than anilin, are, as far as known, not poisonous in the ordinary sense; that is, do not produce distinct symptoms in moderate doses. Some are contaminated with poisonous accessory or by-products, such as arsenic, lead, tin and copper." The same author states that anilin, which is a derivative of nitrobenzene, has decidedly poisonous properties. Persons engaged in its manufacture or use are subject to giddiness and headache, and frequently exhibit a cyanosed condition of the face and lips. Epileptiform convulsions and insensibility also occur in the more serious cases. Acute poisoning in the human subject is almost unknown. In animals the principal symptom is loss of muscular power and co-ordination. There is no specific antidote.

When nitrobenzene, obtained by treating benzene, a coal-tar product, with nitric acid (nitration), is dissolved in alcohol and heated with hydrochloric acid and zinc, anilin is formed. Nitrobenzene is one of the so-called intermediate products used in the manufacture of colors, and sometimes as a cheap substitute for oil of bitter almonds by perfumers

*Weyl: *The Coal-Tar Colors* Translated by Henry Leffmann, M. D.—P. Blakiston, Son & Co., Philadelphia. 1892.

and confectioners. It is a pale yellow liquid, with a strong odor of bitter almonds, which may serve to identify the poison in a fatal case. Its action resembles that of hydrocyanic acid, but is much slower. Death, which occurs from four to five hours after the ingestion or inhalation of a fatal dose, is usually preceded by coma, as in apoplexy. Nitrobenzene and anilin enter into the composition of some varieties of shoe-polish, and several fatal accidents from this source have been reported. In the case reported by W. J. Stone, of Toledo, O. (Jour. A. M. A. Oct. 1, 1904), nitrobenzene only was found in the shoe-polish; in some of the cases reported in Europe the polish is said to have contained anilin also. The two substances are used as solvents for the other ingredients.

The case which I have to report is one of acute poisoning with paranitranilin, a derivative of anilin used in the manufacture of certain kinds of red paint. The history of the case is as follows:

S. P., a Russian Jew, aged 17, was sent to the emergency ward of the Philadelphia Polyclinic by his foreman with a note stating that he had been poisoned with paranitranilin, a derivative of anilin oil. I was in the hospital at the time and was immediately called to see the case by the resident physician. The boy was unconscious and intensely cyanosed; the color of the lips was a deep purple, and the face, neck and chest of a dirty slate, or steel blue color. The hands were thickly covered with grime and paint. The conjunctivae were also bluish. The extremities were warm. The pulse was soft, of fairly good volume, and only moderately accelerated. The breathing was shallow, slow and irregular, at times ceasing altogether until the patient was roused by shaking or sprinkling the skin of the chest and abdomen with ether. The pupils were moderately dilated and reacted to light. The patient had a slight tonic convulsion of brief duration soon after his admission, chiefly affecting the facial and ocular muscles. Strychnin sulphate was administered hypodermically and oxygen inhalations were begun at once.

The drop of blood obtained from the finger was of a dark chocolate color and did not turn red on exposure to the air. With a Dare hemoglobinometer the hemoglobin was found to be 93 per cent. In the meantime the patient's left arm had been sterilized, a vein was opened,

and twenty-four ounces of blood were withdrawn. The blood was of the color mentioned, flowed readily and coagulated promptly; the color did not change on exposure to the air. Before closing the wound, 600 c. c. of normal salt solution was introduced directly into the vein. The venesection and infusion were followed by a slight improvement in the patient's color, and the respirations became deeper and more regular; but the unconsciousness continued. Oxygen inhalations were kept up and strychnin was administered at intervals during the next three hours, with no apparent improvement over what had been effected by venesection, and we determined to try direct arteriovenous transfusion if a donor could be obtained. This proved to be impossible, however, and a second venesection was therefore performed, three hours after the first, from eighteen to twenty ounces of blood being removed from a vein in the right arm. This was again followed by the injection of 600 c. c. of normal salt solution. No perceptible difference in the color of the blood was noted. The patient bore the venesection well, the pulse, which throughout was relatively good, being but little affected. There was a distinct improvement in the color of the face and lips, and in the depth of the respirations. Consciousness was gradually regained, and about four hours after the second venesection the patient roused himself and asked for something to eat. By the following morning, twelve hours after admission, he said he felt perfectly well, although he was still very blue. The color improved rapidly up to a certain point, but there was still some cyanosis when the patient was discharged, eight days after admission to the hospital. The temperature on admission was 101.4° F, the subsequent readings on the chart were normal.

There was no family history of heart, lung or kidney disease. No previous history was obtainable.

When the patient was admitted the cardiac dulness was slightly enlarged to the right, the sounds were somewhat weak, but regular, and no murmurs were present, nor did any develop during his stay in the hospital. There was no enlargement of the liver or spleen.

The urine on admission was amber, alkaline, specific gravity 1022; no albumen or sugar. A specimen examined the following day showed a specific gravity of 1026, alkaline reaction, no albumen or sugar, and a few red blood cells in the sediment.

The blood picture showed very little change. A smear made immediately after admission showed a leukopenia, very slight changes in the color, size and shape of a few erythrocytes, and the following differential count of 200 leukocytes:

Polymorphonuclear leukocytes	42 per cent.
Small lymphocytes	48.5 per cent.
Large lymphocytes	5.5 per cent.
Transitional cells	2.5 per cent.
Eosinophiles	1.5 per cent.

August 21st—the day after admission—red blood cells, 4,650,000; hemoglobin (Dare), 83 per cent.

August 23.—Red blood cells, 3,600,000; hemoglobin 69 per cent.

Paranitranilin is a fine, yellow powder obtained by the action of nitric acid on anilin oil and is used in the manufacture of a certain kind of very durable red paint which is intended for outside work, but is also used for coloring toys and other household articles. While paranitranilin itself is known to be very poisonous, and precautions are taken to protect the workmen who are obliged to handle it in the dry state, the paint manufactured from it is said to be non-poisonous and for that reason to have superseded certain other colors which contain mercurial compounds. Paranitranilin does not volatilise, and the poisonous effect is produced by swallowing or inhaling the dry powder, which on account of its low specific gravity and finely divided state fills the air that the workman is obliged to breathe and settles on his person and clothing. Accordingly the first step in the process of manufacture consists in mixing the powder with water, after which the danger of taking in the powder with the respirations is removed. The mechanical mixture of paranitranilin and water is then converted into a solution by the addition of hydrochloric acid and sodium nitrate and mixed with the oil and other ingredients that enter into the final product. The workmen are instructed, while handling the dry powder, to protect the nose and mouth with a moistened handkerchief, the ends being tied at the back of the head, and, in addition, to wash the hands from time to time during the day. These precautions, if duly observed, are believed to be sufficient to protect against poisoning with anilin derivatives, as well as with lead; as it is probable that these substances enter

the body in the solid, and not, as is sometimes stated, in the gaseous state. During five years that paranitranilin has been used in this particular factory only one other case of poisoning has occurred, less severe than the case now under discussion and ultimately ending in recovery. The chemist informed me that the physician whom he called in to attend the case refused to accept his diagnosis of poisoning and treated

for typhoid fever; so that in the absence of authoritative information, the report of this case is valueless. The fact that no other cases have occurred, however, tends to confirm the belief that the precautions observed are sufficient. I believe as the result of my investigations that the employers in this case make every effort to protect their workmen against the dangers incident to handling poisonous materials. The men are permitted, and indeed urged to wash their hands or take a full bath as often as they please during working hours. In order to induce them to take advantage of the bathing facilities which are provided, the company has adopted the plan of paying the men for taking baths at the rate of five cents a bath; but even with this inducement the workmen neglect to take this simple and common sense precaution. For lead workers a supply of milk is also kept on hand and served out *ad libitum*. Unfortunately it is a fact that many of the workmen who have been engaged in the work for years, appear to be entirely immune to the effects of lead and other poisonous materials in spite of their systematic neglect of all the precautionary measures prescribed, and this makes it hard to convince the green hands that there is danger unless the proper precautions are observed. In the present instance the patient, who is a recent immigrant and entirely ignorant of the English language, probably did not understand his instructions; he neglected to protect his face and was overcome after an exposure of only one hour, on the first day of his employment in the factory.

The Blood:—The only distinct change in the blood was the color which, as stated, was a dark chocolate. A moderate anemia was observed on the day following admission to the hospital when two venesections, with the removal of about forty-two ounces of blood, were performed. The change in the red cells was insignificant, and no nucleated erythrocytes were found. The blood picture is practically the same as that reported by Herrick and Irons, "Chronic Acetanilid Poisoning, Jour. A. M. A., Feb. 3, 1906, except that in the latter there was a mod-

erate leukocytosis—9,000 to 12,000—and the polynuclear leukocytes were increased in the differential count at the expense of the lymphocytes. No examination for methemoglobin was made.

The mode of production of the cyanosis observed in cases of poisoning with anilin derivatives is still in dispute, although it has engaged the attention of observers since the beginning of the coal-tar era. In the acute cases at least, it is apparently not due to cardiac weakness; the extremities, even when they are cyanotic, are not cold to the touch and the disturbance of the breathing is not severe enough to account for the cyanosis. In the present case the heart, except for an apparent slight dilation, was practically normal and the dyspnea, while extreme, was not of the cardiac type. The breathing was slow, not fast, and improved when the patient was aroused. It resembled that of opium poisoning, except for the presence of cyanosis and the absence of pupillary contraction. A distinct improvement was noted after the withdrawal of blood, suggesting that the dyspnea was due to the action of the poison on the respiratory centre. It may be mentioned in passing that the occurrence of methemoglobin, which has been held responsible for the cyanosis, has recently been called in question. Herrick and Irons failed to find it in the blood, although five examinations were made. Landois, who refers to its occurrence in carbon monoxid and in anilin poisoning, says: "Lesser degrees of methemoglobin may recede spontaneously in the body without destruction of the erythrocytes. Profound influences resulting in the production of methemoglobin destroy the blood corpuscles and require transfusion."

Urine.—The urinary findings agree with those reported in other cases, except that the reaction was alkaline. There were no evidences of injury to the kidneys.

Treatment.—The favorable outcome in this case, may, I think, be attributed to the prompt withdrawal of a large part of the poison by the free venesection employed. The stomach was not emptied because it was believed at the time of the patient's admission that the poison had been inhaled in the form of gas. The oxygen administered constantly during the first six hours no doubt also aided in bringing about recovery, although the power of absorbing oxygen must have been very greatly reduced. The amount of blood withdrawn in this case was large. Since the specific gravity of the blood is 1058 (Landois), 2 3-4 pints,

the amount withdrawn, is equivalent to approximately 2.88 pounds of blood. Assuming the boy's weight to have been 130 pounds, the total amount of blood in his body was 1-3 of 130, or 10 pounds, so that the amount of blood removed from the circulation within the space of three hours was 28.8 per cent or over 1-4. The serum was at once replaced, however, with normal salt solution, which was injected directly into the veins. The advantage of intravenous infusion of salt solution over hypodermoclysis is not generally admitted and many surgeons prefer the latter method. It seems, however, that in cases like the present, where large amounts of blood are abstracted, the method is to be preferred on account of the greater speed and certainty with which the fluid is made to enter the circulation, particularly as the absorbent power of the lymphatics may be impaired along with the general vital forces. Owing to the marked change in the color of the blood it was believed that direct arterio-venous transfusion was peculiarly indicated in this case, and an effort was therefore made to find a donor. I was much disappointed when I failed in this, as it seemed the only hope of saving the patient's life. The result, however, affords one more argument that the infusion of normal salt solution probably accomplishes as much as the more radical method of arterio-venous transfusion. The latter has been tried repeatedly in cases of anemia of various types since Crile's communication on the subject about a year ago (*Jour. A. M. A.*, Nov. 3, 1906) with variable, and at least one fatal result. Dr. G. M. Dorrance has given me the notes of three cases in which he performed direct transfusion by arterio-venous anastomosis during the current year. The first was a case of pernicious anemia in a woman whose hemoglobin at the time of transfusion was estimated to be 10 per cent. The blood was supplied by the husband and the transfusion lasted one hour. The immediate effects in this case, which was under the care of my colleague, Dr. Riesman, were striking, the hemoglobin going up to 40 and later to 60 per cent. The improvement was not permanent, however, and the patient died a few days ago, about seven months after transfusion. In a second case, one of acute lymphatic leukemia, no effect was apparently produced and the child died the next day. In the third case the transfusion was performed for the control of typhoid hemorrhages and was followed by recovery. The hemorrhage stopped immediately after the transfusion. The patient was a man, age

27, and the blood was obtained from his brother. Pepper and Nisbet have recently reported a case of arterio-venous transfusion in a case of "hemorrhagic disease of obscure type and unknown etiology" which was followed by fatal hemolysis (Jour. A. M. A., Aug. 3, 1907). Until our knowledge of the conditions under which hemolysis may take place is more complete, it will be the part of conservative medicine to adhere to the well-tried methods of hypodermoclysis, or intravenous infusion of normal salt solution. So far as we now know, the most promising indication for direct arterio-venous transfusion would seem to be the arrest of hemorrhage by increasing the coagulability of the blood.

The derivatives of anilin commonly employed in medical practice are the drugs of the acetanilid series, chiefly acetanilid, or antifebrin, antipyrin and phenacetin. A great number of substitutes for these three main representatives of the type have been put on the market, from time to time, but few of them have been generally adopted. Among the more permanent may be mentioned salophen, lactophen, citrophén, and, especially, aspirin and salipyrin, pyramidon and bromoform. All antipyretics, as this class of remedies is called, owe their activity to the formation of simple derivatives of paramidophenol in the tissues. It has been found that the rapid formation of paramidophenol is attended with blood destruction and collapse, the antipyretic effect passing off very rapidly. Those drugs are the most satisfactory antipyretics and analgesics in which the decomposition proceeds gradually, so that the temperature falls slowly and remains low for a longer time (Herrick and Irons). For this reason, phenacetin, which is the type of the phenetidins, is safer than the simpler antipyretics, acetanilid and antipyrin. Aspirin is another member of the group and has come into general use as an antirheumatic instead of the salicylates. It is next in efficiency to the latter, and slightly more active than salol, and may be given in doses of ten grains four times a day. It is indicated in myalgia or muscular rheumatism and in articular rheumatism as a succedaneum for sodium salicylate when the latter proves too irritating to the stomach. Instances of intolerance to aspirin in smaller doses, however, have been reported.

The action of acetanilid is first to accelerate, and then to retard the pulse rate, and to lower the temperature. The blood pressure is dimin-

ished. After a toxic dose alarming symptoms develop, the most conspicuous being cyanosis, dyspnea and rapid pulse, and, in severe cases, collapse, loss of consciousness and epileptiform convulsions. Acute cases are not, as a rule, difficult to recognize; it is when there is no history suggesting poisoning and the symptoms are vague that one is in danger of overlooking a case of chronic acetanilid poisoning. Her-
rick and Irons, who made an exhaustive study of the effects of chronic acetanilid poisoning on the blood and urine (*Jour. A. M. A.*, Feb. 3, 1906) give the following summary of the symptoms of chronic acetanilid poisoning: Cyanosis that may be extreme; more or less dyspnea and general weakness; dark colored urine that contains paramidophenol and an increased amount of the ethereal sulphates. Generally present, and often a most striking and characteristic condition, is anemia of the secondary type with degenerated and nucleated red corpuscles. Methemoglobin may be present in the blood and in the urine. Dizziness, syn-
copal attacks, tinnitus, palpitation may be pronounced where the anemia is advanced. The spleen is often enlarged. Anorexia, nausea, vomiting and diarrhea may occur. Nervousness and restlessness are aggravated by the removal of the drug, to which the patient has become habituated.

Acetanilid is contained in practically all so-called headache powders, of which it forms the chief ingredient. Bromo-caffein, which is sold at every soda water fountain, contains about three grains of acetanilid in every teaspoonful, and orangeine, another popular preparation, also owes its efficacy to the drug. Fortunately the sale of these preparations appears to have diminished since the agitation against patent medicines began to call especial attention to them, but we still hear of cases from time to time and read of serious accidents in the daily papers. Acetanilid and its congeners have their uses and we could not very well get along without them, but they should no more be taken without a physician's orders than morphine or strychnine, or any other powerful drug.

The Menopause.*

By H. E. Mitchell, M. D.,

North Birmingham, Ala.

The menopause is a permanent arrest of all the functions peculiar to the reproductive organs, it is the inversion of the development of puberty, it marks the end of actual sexual life, and while some pass through it without very many pathological changes, with others it is a very critical period and is marked with various functional disturbances. In many their characters are changed more or less, some become difficult to please, are sharp-spoken, and are sometimes devoid of reason; are fretful, jealous, not only of their husbands, but of every one that she has any claim upon—stubborn, frivolous and become addicted to the use of alcohol or some nerve-tickling drug, all seemingly from lack of self-control. Perhaps to these conditions, in part at least, may be attributed the bad reputation which is given everywhere to a great many mothers-in-law.

Some who have never had very much sexual desire, suddenly develop a passionate nature. However, this may be an out-break of a suppressed passion in youth or before marriage that manifests itself at this period which a woman has to pass in two or three years that takes a man twenty years to live. A man grows old, as Reed says, by merciful and gentle gradations and so he slides half willingly and half unconsciously into the afternoon of life with regrets so soft that they can scarcely provoke a sigh, and is an evolution for him, while it is a revolution for her. She perceives that her charms, her youth, her sex itself are passing from her. She is invited with cruel abruptness to be to her husband merely an intellectual companion or a sexless helpmeet, when she has been of late the objects of his embraces and the mother of his babes.

On the other hand we will find some who are child-like, submissive to everything around, and perhaps those who have always been tidy, always clean and neat, become slovenly in her house or person,

*Read before the Jefferson County Medical Society.

careless of every one that she cares for and loses interest in everything, abhors solitude and relies on others entirely.

This change is produced in various ways—some simply go over for a few days or a week at first, then for a longer period until it finally stops, in others they miss, say one time entirely, then perhaps for a few times regular, then miss several months, and so on until it stops entirely.

Now we have others that the flow is oftener, say every week or two, or even less, some of them have almost a continual flow which may place your patient's life in great danger. These we might call the abnormal and include as well menorrhagia, metorrhagia or irregular bleeding after the periods have ceased, or those cases of leucorrhea that get more profuse after the menopause which are always pathological conditions and we should be on guard for malignant growths, as there is increased danger of malignancy either in the cervix, uterus or of the breast at this time.

While on the other hand it may cure pelvic diseases that existed before, especially where they have depended upon the functional activity of the organs involved and leave your patient who has been a long sufferer to enter upon a new life of increased vigor and usefulness.

We may encounter a great many symptoms which are referred to the circulatory, nervous or the digestive systems, or perhaps to the pelvic organs themselves. We have hot or cold flushes of the face, hands and feet, or the entire body may be affected. At the beginning of the menopause a woman is more liable to have tachycardia, for at this time the heart is affected perhaps more than any other organ.

In irritable women we may have hysteria or neuralgia in various parts of the body. I have seen cases that it was confined to the head entirely, in others to the lower extremities, and in others widely distributed pains, which are always worse at night. Burning pains in the stomach, mental exaltations inclined to meddle with business affairs that she never noticed before. Sometimes we have dyspnea, apprehensiveness or loss of memory; there may be melancholia, fear, anxiety, insomnia and even insanity, which we should be very careful to watch closely for in very irritable patients or in those who have a

family taint. The digestive system is affected with such things as dyspepsia, torpid liver, intestinal flatus-acne over the face and chest, constipation or diarrhea.

Of the local disturbances we might have pelvic congestion, back-ache, irritable bladder with a downpour of urine, or a weight in the pelvis.

As to the artificially produced menopause I will let some of our surgeons who have had good opportunities to study it discuss the symptoms. I have had a very limited experience with those cases and will not undertake to give the symptoms leading up to this condition in them. Now as to the treatment will say it should be entirely symptomatic. The nervous symptoms are perhaps best relieved by the use of the bromides. If the pulse is of good volume, tension and rate the sodium bromide in fifteen to twenty grain doses three or four time a day. Wilcox suggests that if there is hypertrophy of the walls of the left ventricle, the potassium salt should be substituted. If dilatation has supervened or the tension is lowered the ammonium salt is to be preferred. If dyspeptic symptoms are present or if prolonged administration seems likely as is often the case strontium bromide is advisable, and what the bromides will accomplish rapidly arsenic will achieve, but more slowly and more permanently. So as he diminishes the bromides he adds potassium arsenic in three minim doses after meals and at bed time.

I have often found in the continued use of any of the bromides that a great many stomachs will not tolerate them. I saw one patient that formed the bromide habit, she took it in Peacock's bromide in very large quantities, perhaps three or four ounces each week.

Ashton suggests the use of picrotoxin in 1-100 to 1-80 grain doses three times daily and cold baths. Most patients are more or less anemic. In these cases I think you had better administer iron in some form, say the citrate of iron and ammonium or in Basham's mixture, in fact any form of iron that you may prefer and that your patient is able to take.

In cases where the cessation of menstruation has been speedily established as in young and robust patients after the removal of the ovaries, Wilcox recommends the administration of ovarian extract in five grain doses three times a day for a month or two if necessary, gradually diminishing the dose.

For headache perhaps you may get more relief from getsimium bella-donna or monorbromate of camphor. For the psychic disturbances trional and heroin or dionin have been recommended for occasional use, but should never be given regular. Tr. veratrum is perhaps the best thing for the palpitation if necessary.

Constipation is best treated by the use of saline laxatives, Rochelle salts, hunyadi, apenta or any laxative water. So much for the medicinal treatment, you might change the surroundings of your patients, change climate, use cold baths daily, with hot baths two or three times a week, plenty of fresh air, out door exercise, plain nourishing diet and regular hours for sleep. See that all lacerations of the cervix are repaired to guard against future growths. As to tachycardia it usually ends itself with the loss of nerve supply to the ovaries when they atrophy, use every effort to keep the confidence of your patients and use as little medicine as you can.

Convulsions in Childhood.

By Z. B. Chamblee, M. D.,

North Birmingham, Ala.

A convulsion is an acute transient nervous disturbance, characterized by involuntary rhythmical spasms of the muscles, either of the face, trunk or extremities, or all of them usually accompanied by loss of consciousness.

Among the principal predisposing etiological causes are infancy, conditions affecting the nutrition of the brain and heredity influence. From the fact that the brain grows much faster during the first year of life than afterwards is in itself an important predisposing cause of functional derangement. After infancy convulsions are much less frequent and after seven years are very rare.

Rachitic children are very prone to convulsion, and a spasm is often an early symptom of that disease and when no other apparent cause is present ricket should always be suspected. Any such disturbances as exhaustion, malnutrition, syphilis, and any debilitating disease, or

*Read before the Jefferson County Medical Society.

some time acute diseases, especially those of the digestive tract, are causes. Children seem to inherit a nervous temperament from parents some time, and such children are much more liable to attacks. Probably more females are affected than males, according to text-books. The exciting causes include a large number of pathological conditions, and those of the digestive tract take the first place.

For convenience this might be grouped under three headings: (1) direct irritation of the cortex of the brain, and (2) indirect reflex irritation, and (3) toxic influences. Under the first heading would come those diseases of the brain, such as meningitis, abscess, hemorrhage, hydrocephalus or thrombosis; while some reflex causes would be severe injury of bones, compound fractures, colic, retention of urine, phimosis and such like causes. Also I might mention dentition and worms as rare causes of convulsion in children.

Under the toxic influence I would mention disorders of digestion both acute and chronic forms. That is to say the presence of indigested food in the stomach or intestines and this of all causes both in infants and older children is the more frequent. Coming under this head also is the convulsion at onset, sometimes of pneumonia, scarlet fever, measles, whooping cough, malaria, typhoid fever and diphtheria, etc.

There are convulsions which are termed idiopathic, in which no apparent cause is found.

PATHOLOGY.

The venous discharge which occurs during a convulsion differs very little from ordinary epilepsy. However, in epilepsy the tendency to recurrence becomes greater until the discharge may take place from very slight causes.

The cortex of the brain seems to be the part involved, and during or beginning of an attack the brain is very anaemic, this is shortly followed by venous hyperemia which may be very intense. In infants who die during a convulsion the brain and meninges are usually found intensely congested.

SYMPTOMS.

A convulsion as a rule is ushered in very rapid and suddenly. The face becomes pale, eyes are fixed, sometimes rolled up in their orbits, convulsive twitching of the muscles of face, hands, eyes or feet

which soon become general all over the body unless due to local cause which may then be unilateral. Prodromal symptoms, such as restlessness, irritability and some twitching of muscles may precede the above symptoms.

The neck is thrown back, hands clinched, thumbs buried in the palms of the hands and a quick spasmodic contraction of the body occurs. There is loss of consciousness in all true convulsions and possibly frothing at the mouth, respiration is feeble, shallow and possibly spasmodic. The pulse is weak and rapid and the face is often bathed in a profuse perspiration, there may be involuntary action of bladder and rectum. A rattling sound is often heard in throat. The lips may become blue at first, this condition may last from a few moments to half an hour. After this patient becomes less rigid and more relapsed and usually falls off into a deep sleep or stupor like condition. These spasms may be repeated in very quick succession or may only have one and pass off. Death due to asphyxia may occur during height of convulsion. One convulsion predisposes to another from a less powerful exciting cause than the previous one.

DIAGNOSIS.

There is rarely any trouble or difficulty in recognizing an attack of convulsion, but the trouble comes from deciding on what is causing the convulsion. Whether it is epilepsy, disease of brain, gastric disturbance or reflex action or some acute disease a careful history must be obtained and all the circumstances surrounding the patient taken into consideration. In infants epilepsy is least probable. History of previous attacks, a sudden outcry or falling and biting of tongue in larger children with complete recovery in a few hours would be suggestive of epilepsy. Convulsion occurring in brain disease as a rule except in meningitis are not accompanied by rise in temperature. In convulsion depending upon some disorder of the digestive tract you would probably get a history of constipation, some error in feeding, and this is after the coma. The organs of digestion should be the first to be looked after. Examination of the urine should never be omitted whether there is dropsy or not.

PROGNOSIS.

This depends upon the age of the child and the cause of the spasm. Convulsion occurring at onset of acute disease is not necessarily serious

and hardly ever fatal. Especially fatal are convulsions due to pertussis, death due to asphyxia. In nephritis they are serious, but not fatal always. A prolonged or frequently recurring spasm is to be prognosed with a great deal of care, not only its immediate results, but probable outcome must be taken into consideration; except where convulsion mark the beginning of epilepsy, they are less serious than the laity usually suppose. There are some cases of epilepsy which have their beginning in simple convulsion, due to digestive disturbance, but keep repeating until the habit is established.

TREATMENT.

This depends as does the prognosis upon the cause. For an immediate attack chloroform, morphine and chloral might be mentioned as possibly the most frequently used drugs. When a child is seen suffering from a convulsion possibly the inhalation of chloroform is the best thing to be done, even in very young infants it is not contraindicated. After the spasm passes off the child's stomach should be washed out, if it is suspected of being loaded with food and bowels thoroughly irrigated with a high rectal tube. This should always be done as quite often we move the cause this way. Chloral given in solution per rectum acts very nicely in contracting the convulsion; say 4 to 6 gr. to a child between 6 and 12 months old. When chloral fails morphine should be given hyperdemically; a 1-50 of a grain to a child 6 months old. A child suffering from convulsion stands opium exceedingly well. The child should be kept exceedingly quiet, as sometimes the slightest noise may induce a convulsion. The bowels should be opened with calomel or castor oil. The child's feet may be placed in a warm mustard bath and sometimes a hot bath during a convulsion will relieve it. When once the convulsion is under control a recurrence may be prevented by keeping the patient under control by a sufficient amount of chloral and brom sodium. As soon as the convulsions have ceased the cause may then be looked for and treated. A careful dieting is of prime importance, as so many of these cases come from indigested food and improper feeding. If there is high temperature this should be reduced by the cold bath or pack. The child's general condition should be looked after and if anaemic or run down cod liver oil, iron, arsenic, plenty of fresh air and good nutritious food. Of course if epilepsy is diagnosed the pro-

longed use of some of the bromides will be considered in the treatment. If convulsion is due to phymosis which is often the case, a circumcision is to be done. Adenoid of the pharynx should be removed and also any other source of reflex irritation.

Diagnosis of Some of the Non-tubercular Joint Troubles.*

By Wm. T. Berry, M. D.,

Birmingham, Ala.

There are a great many affections of the joints of the body other than those of a tubercular variety which are not at all easy to recognize. We see much written in books and general medical literature on the subject of "arthritis deformans" and the idea is current among many medical men that it is altogether a chronic trouble causing very little if any fever or pain and starting in the smaller joints of the body. I believe this is an error, for many cases of so-called "chronic rheumatism" which have re-current acute manifestations are nothing but "arthritis deformans." In this acute manifestation we can note the patient complaining of a sudden onset of the trouble, sharp pain in a knee, hip or shoulder joint with much swelling and redness of the joint and possibly a temperature of 101° 103° F. In this type of "arthritis deformans" we don't see the shifting about of the disease from joint to joint as we observe in "acute rheumatism" and the joint is usually left crippled while it will clear up in rheumatism. No sweats, no heart complications are found in this trouble, symptoms of which you will likely see in rheumatism. The salicylates do no good as they do in rheumatism. When the joint fails to clear up, osteophytic growths and atrophic joint changes take place, muscular atrophy and deformity noted; it then becomes no trouble to diagnose "arthritis deformans." It is well to keep in mind the fact that an arthritis accompanied by fever, commencing suddenly and having other acute manifestations often-times means "arthritis deformans." Dr. McRae of Johns Hopkins found 40 per cent. of about 100 cases he investigated begun suddenly and acutely. While the smaller joints may be early involved it is also true that the larger ones may be early affected. Much useless drugging

*Read before the Jefferson County Medical Society.

of your patient, unnecessary dieting and bathing, in fact much can be accomplished by realizing early with what you are about to deal in these cases of articular troubles. Hemarthrosis resembles very closely an acute synovitis, but there is always a history of injury in synovitis and the pain and discomfort is greater whether the limb be at rest or in motion, the effusion disappears more slowly in acute synovitis than in hemarthrosis. A carefully executed aspiration of the joint will do no harm but add light in a doubtful case.

In syphilitic arthritis you can usually get the history of syphilis, the pain is of a boring type, worse at nights, but not of the character of a pain in tuberculosis of the joint which causes "night-cries," may find the Hutchinson tooth. By applying the syphilitic treatment all symptoms will be abated and your diagnosis cleared up.

A "spondylitis" may follow typhoid fever or come on during convalescence. Marked neurotic symptoms usually are present in this condition with pain and disability. A not uncommon mistake is made by supposing only one joint at a time is affected in an arthritis following typhoid fever when very often two or more joints may be affected. The history of the typhoid fever in connection with the joint symptoms makes the diagnosis easy.

A "pneumococcic arthritis" is more likely to be seen in the young than adult patients. The pain, discomfort, swelling and local heat in a joint resembling a "typhoid arthritis" when they arise in a case of "pneumonia" will satisfy you with what you are to deal.

Gout is mistaken very often for rheumatism, for not a few physicians still hold to the idea that gout is confined to the rich and high-livers. This is not altogether true, for there are many cases to be seen among the poorer classes which are wrongly diagnosed as rheumatism. Heredity, beer-drinking, lead intoxication, wrong eating with scant exercise are striking features in the production of gout. Paper-hangers, brewery employees or any one who is intemperate in eating, or taking his glass of wine and lax about his bodily care is liable to have an attack of "gout." As a rule if a poorly nourished patient from among the lower classes consults a physician because of a lame knee, swollen wrist or sore shoulder gout is never thought of, but the patient is given at once "anti-rheumatic" drugs without going into the merits of his case, but taking for granted it is rheumatism. Gout should be looked

for in any patient no matter what his position in life may be, who is suffering from obscure joint pains, soreness and stiffness in the joints with a history of a previous attack of a similar kind. Many so-called "atypical cases of rheumatism" may prove to be gout on closer inspection. If you find the "big-toe" arthritis with the irritable temper and febrile condition and tophus in the ear or joints of a rich patient it is easy to think of gout at once.

When a joint swells rapidly, is very sensitive, hot, red and painful and the constitutional symptoms are pronounced, high fever, sweats, etc. I believe we are warranted in calling such case septic arthritis and aspirating the joint and if pus be found radical treatment instituted at once. If we find pain in a joint, especially the knee joint, when there seems to be no organic disease of the joint to cause such a pain we call the condition a "neurotic joint." This is one of the most confusing affections of the joints which we have to diagnose. I believe Mr. Morton of England, is right in saying that it is better to explore a neurotic joint if in doubt, as to diagnosis, than to treat an organic disease, such as a tubercular knee-joint, or hip, on the lines of a neurosis. By so arriving at a diagnosis you may be sure that there are many cases of organic disease of the joint cured by proper treatment. In a neurotic joint the pain is all out of proportion to the other symptoms and is not worse at nights, for if the patient falls off to sleep that ends the pain until they awake, which is not so in a tuberculous joint which causes "night-cries." There will be no increased heat over the joint, no thickening of the soft tissues and any apparent enlargement of the ends of the bones will be found to be due only to muscular atrophy.

Rheumatoid arthritis from its name suggests rheumatism which it resembles very much in its distribution and clinical picture. Galdthwait of Boston, says it begins with gradual stiffening of the joints without very marked destruction of the joints. The patient complains of pain and discomfort which is most marked in damp weather and after exercise of the limbs. The limbs become fixed in an attitude of deformity and held there by muscular contraction. The young and females are more prone to rheumatoid arthritis than the adult or male. It might begin in the young acutely in many joints with pain on motion, stiffness, deformity, local heat and some infiltration in the joint if much attempt has been made to use the body. It makes rapid progress

at times and adhesions and contractions within and without the joint will ankylose the joints. The lymphatic glands of the axillary and inguinal regions are oftentimes enlarged.

Gonorrheal arthritis is one of the most common of the non-tubercular joint troubles because the cause of the disease is so wide-spread. It is safe to say that 4 per cent. to 5 per cent. of all cases of "gonorrhea" are complicated by an arthritis which is in a large per cent. of the cases monarticular, the knee-joint being the joint most commonly affected. The joint becomes suddenly swollen, great discomfort is experienced by the sufferer, pain is severe. If any attempt be made to use the limb it will be found tender and stiff. Local heat, infiltration of the tissues will be noted, especially is this infiltration to be found in the superficial and periarticular structures rather than being within the joint so much.

If these cases are badly treated they will usually result in ankylosis of the joint with deformity of the limb. Any obstinate, monarticular painful swelling of a joint, although active gonorrhea is denied, should suggest "gonorrheal arthritis." Such cases are reported as having been cured by direct treatment of the gonorrheal disease in or about the seminal vesicles. When the acute symptoms are present with the gonorrhea it is easy to recognize the trouble.

Prophylaxis in Disease.*

By Y. L. Abernathy, M. D.,

Hill City, Tenn.

The proverbial ounce of prevention has assumed immense proportions in the presence of modern therapeutic nihilism, Oslerism, etc. While it is by far the most important factor for our consideration, **yet it** does not follow that it is all in all, and that remedial agents are to be ignored and condemned.

There is a happy medium between the extremes of pessimistic skepticism and optimistic credulity. The pendulum swings too far in both directions. It is a characteristic of doctors, as well as the rest of the *genus homo* to exaggerate the importance of their ideas, schemes

*Read before the Southern Medical Association.

and theories. Particularly if self-aggrandizement or pecuniary advantages are to accrue as results. This idea is well illustrated in the vehemence and persistency of the proprietary vendor, and other commercially interested therapists. As well perhaps as by a great many specialists, who can not see any good beyond their limited horizon, and deem it necessary to depreciate other departments that theirs might appear great. Their world revolves around the scalpel, the x-ray or the microscope.

I wish to emphatically challenge the sentiment from any and all sources, "that there is no efficacy in drugs," "that we have no specific save antitoxin," "that expectancy or masterly inactivity are preferable to therapeutic measures, etc."

While it is true that the various exanthems and inflammatory diseases are self-limited and yield only to the *vis medicatrix naturae*, yet they are mitigated and modified by proper therapeutic remedies, and of course should always be under the care and treatment of intelligent physicians. It isn't just to condemn or criticise treatment because of its failure to cure, or to change natural law in diseased processes. It is just as necessary and important to conduct and treat these in a rational manner, as it is those for which we have specifics. Or in other words the office of the physician and efficacy of drugs are not to be despised or belittled even where it is acknowledged they possess the least power.

They arise to the sublime when we contemplate the marvels and miracles of specifics for the horrors of pain in opiates and the various anodynes and anesthetics, quinine, mercury, iodides, arsenic, etc., in that large and varied class of malarial diseases and syphilis. Besides numerous other remedies of recognized potency, all of which have come to us, as if by chance, out of the field of empiricism.

Now that an exact, scientific serum therapy has furnished some, and promises more remedies of wonderful specific powers, we who hold to the antiquated, obsolete faith in remedies for disease feel that we can claim the dignity and honor of being at least a small factor in the sum total of the medical world.

This slight digression from my subject is to serve notice upon the various specialists, that we are still in the ring, lest they forget.

A bill of indictment against the medical profession for dereliction of duty would hold it responsible for the existence of all contagious, infectious maladies. They are preventable and it is strictly within our jurisdiction, and province to consummate this great and important object. Enough has been done to prove that all can be done. To speak of the brilliant achievements concerning smallpox, yellow fever, bubonic plague, etc., is only to repeat familiar history. Indeed it is impossible to add any new thought or original suggestion along these lines. Would only attempt to refresh your memories and open the most interesting and important of all themes for medical discussion.

The fight upon tuberculosis easily leads all others in interest and magnitude and is giving exceedingly gratifying results. Dr. Biggs, of New York, reports 33 1-3 per cent decrease in mortality through proper sanitary and hygienic measures.

The laity as well as the profession keenly appreciates the situation throughout the world and immense treasure, public and private, and measures upon a gigantic scale are being utilized universally to prevent and destroy the great white plague.

Each city and county should and will ere long maintain two separate sanitariums, or what is better perhaps farms, for the tuberculous; one for the incipient, curable cases, the other for the incurable. This affords the best opportunity for recovery, and removes the deadly menace to society. The disease should and will very soon be placed on the list of infections to be reported, and placarded by the attending physician just as smallpox and diphtheria. Some of the western states have already quarantined against it, and strenuous efforts through legislation, and otherwise, are being put forth for its eradication everywhere.

The venereal peril furnishes a close second to tuberculosis, and a problem more difficult of solution. It will eventually be reached through education and legislation. It is perhaps the greatest enemy to longevity, and even threatens race suicide. To discuss it adequately would require a volume.

Likely more sorrow, suffering and death accrue to the race through this polluted agency than any other, save the damnable abomination and horrible devastating, hellish curse of *alcohol*.

Here is the acme, the limit, the crowning infamy of all the ages. The fiendish, devouring, insatiate octopus with its slimy tentacles enveloping the world. The vile putrid cancerous excrescence upon the body politic. The breeder of insanity, riots, rapine, murder and suicide. The author and promotor of vice, crime and disease in all their hideous forms. A veritable hell, whose blighting red glare flashes from a million gilded shrines to Bacchus, rivaling in tortures and horrors Dantes Inferno.

But epithets and anathemas and the most lurid adjectives of all the languages are totally inadequate to depict the enormity of the evil. The blackness, rottenness and stench of its infernal festering corruption, evolving, and bequeathing only calamities, sorrows, degradation, despair and death. Where is the individual who has not directly or indirectly been stung by the poisonous fangs of this loathesome serpent? It is the common enemy of the entire race. Is there a remedy or preventive? I ask our honorable president of Georgia where something dropped so hard recently that it shook the continent.

If prohibition could win in Georgia and in nearly all the counties of Kentucky, with their well earned, and recognized bibulous proclivities, and naughtily satanic deportment, why couldn't it anywhere? even in Alabama, and more specifically in wild, woolly, wicked Birmingham? the home of Cunningham.

Ah! sirs, it will triumph when and wherever tested. The accumulation of wrecks, ruin, grief and outrages of centuries. The sighs, tears and groans of unnumbered millions have swollen to a cyclone of righteous indignation, and irresistible power that will sweep the monster from the earth, forever. It is peculiarly the prerogative and duty of the medical profession to hasten this desired object. Likewise as already stated to destroy and prevent all contagious, infectious diseases.

This though an Herculean task will be accomplished, slowly and painfully, through education and legislation. Then the chloroform stage will move up from 60 to 100.

This idea may be utopian or ultra optimistic. Centuries may come and go before any medical Alexander will weep for more worlds to conquer.

Even now the diseases which have been combatted with such wonderful success are prevalent, on our continent, and in other countries.

It is consoling, however, to think that if we have no medical mathematics, and results are not perfect that they will compare favorably with those of the clergymen, and of the legal fraternity and statesmen.

"There is so much good in the worst of us
And so much bad in the best of us
That no one has any right
To criticise the rest of us."

President's Address Before the Southern Medical Association.

*By Henry Hagar Martin, M. D.,
Savannah, Ga.*

I have no words to express my gratification at being permitted to take part in the organization of this association. An association, the future of which is so well assured, that any man, no matter to what height he may have attained in his profession, may well be proud of having held the office with which you have honored me. We have entered upon a new era in our profession. The doctor of today is not the humble hack of a few years ago. But has become a power to be reckoned with, and is no small factor even in the legislative affairs of the nation. As witness, the recently enacted pure food laws, made possible only by the active co-operation of the medical professional. All because of efficient organization. But, with all that, our profession remains as ever, the most noble, humane and charitable of all the professions, the only profession that is daily crucifying itself for the common good. And while we cannot as yet claim that the practice of medicine is an exact science in all its branches, there is around and about us a gratifying large number of intelligent, earnest workers, laboring diligently to that end, and to the end that the science of medicine may be elevated to the highest possible standard of efficiency, and those who practice it to a moral plane that will permit of no deviation from the code of a gentleman.

LIMITATIONS OF STATE SOCIETIES.

Owing to the natural limitations of our state societies and the absolute impossibility of an equable division of the scientific work in the

National association, there is an imperative need for just such an organization as that. An association that will give us better opportunity for that self-improvement and greater achievement in the realm of scientific endeavor, which are required of, and should be the natural heritage of the progressive and cultured physicians of this section.

Aside from these arguments in its favor, attendance at the annual meetings of the American Medical association involves a larger expenditure of time and money than the majority of us can afford every year.

Therefore, we go, now and then, and in the meantime stagnate. Realizing these facts and condition, an extensive correspondence (originating in that most exemplary and progressive body, the Nashville Academy of Medicine) was carried on last year between the presidents of the state societies of Georgia, Florida, Tennessee, Alabama, Mississippi and Louisiana, culminating in a meeting of delegates from these six societies at Chattanooga last October, in conjunction with the Tri-State Medical society of Georgia, Alabama and Tennessee, for the purpose of perfecting such an organization. After three days' session the Tri-State unanimously resolved itself into the new organization, which was enthusiastically launched on its career under the name and title of the Southern Medical Association, Southern Branch of the American Medical Association, in accordance with article 7 of the constitution of that body. This action has been endorsed by each state society mentioned and by the American Medical Association. Similar organizations have been effected in the southwest and in the northwest, and in another twelve months all of the proposed districts will have completed their organization.

God forbid that differences, sectional or otherwise, should ever arise between this body and the National Association, but we must be left free to exercise our own discretion in any event.

CHATTANOOGA'S REGULATION.

As you probably know, a provisional construction and set of by-laws were adopted at the Chattanooga meeting under which we are at present operating. These articles, with a few alterations, will be presented to you this evening for ratification.

Your president, secretary and council have gone over them carefully and painstakingly and we believe that they are fully adapted to the requirements of this association. The time for the annual meeting was

only determined upon after mature deliberation, and we believe, all things considered, that we have chosen for the best interests of the association and its members.

I beg to call your attention to the provision in these articles for altering or amending at any annual meeting.

The scientific work of this association has been divided into three sections: Medical, surgical and ophthalmological, with a chairman and secretary for each, and it will be the duty of these sections to elect their officers for the ensuing year at their last session of this meeting, as provided for in the by-laws.

PUBLICATION OF TRANSACTIONS.

No provision has been made as yet for the publication of our transactions, the council not having reached that subject in their deliberations. But it is the opinion of your president that some provision should be made for such publications. I've no doubt that the Journal of American Medical Association will publish them, if asked to do so. And I would suggest that when you consider the question of annual dues you make them \$3 instead of \$2, thus providing for the publishing of our transactions in book form.

In closing I wish to express my entire satisfaction with the unqualified success of this, our first annual meeting, and to publicly thank the various section officers for the most excellent program furnished for this meeting. I have never seen a better one in any medical association in this country. The Southern Medical Association is tonight an accomplished fact. Its future is in your hands to make of it what you will. To the medical profession of Birmingham my message is, thank you, gentlemen, for having extended to us that hospitality for which Birmingham is famous.

A CASE OF VERY LARGE DILATATION OF THE CECUM.

Thomas W. Harvey of Orange, N. J., describes a large dilatation of the cecum which came under his observation. The autopsy showed the sac, which was adherent and distended, to be an enormously dilated cecum.—*Medical Record*, September 21, 1907.



Editorial.

W. H. BELL, M. D., Editor.

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The Antiseptic and Germicidal Power of Solutions of Formic Aldehyde.

A great amount of work has been done in the last twenty years with formic aldehyde, as a gas, and in watery solution to determine its value as a germicidal and antiseptic agent. There is great need of an efficient, safe and cheap disinfectant, especially for the disinfection of the excreta of those sick with infectious diseases. In the opinion of Anderson formic aldehyde comes nearer to fulfilling these conditions

than any other agent we have at the present time. He has recently made some interesting experiments to determine its real value, led, as he says, by the great variation in the results of various workers in regards to its action as a germicide and antiseptic in its watery solution.

A series of experiments was made to determine the restraining influence of formic aldehyde in 37.2 per cent. solution upon the development of bacteria and molds in stable manure, garden earth, etc. For this purpose nutrient broth was placed in sterile flasks and formalin added in proportion of 1 to 7000 down to 1 to 500. The broth was then inoculated with the various materials, kept at room temperature, and observed for fourteen days. The results showed that the lowest dilution in bacterial growth occurred was 1 to 4,000 and molds 1 to 1,000.

Another series of experiments was made to determine its antiseptic action against pure cultures of bacteria. The results showed that none grew in a stronger solution than 1 to 3,000.

He also studied the germicidal power of formalin in various strengths on pure cultures, human feces and sputum. He gives the following as the summary and conclusions of his experiments:

One per cent. formalin (containing 37.2 per cent. aldehyde) killed the vibrio of cholera in ten minutes, *B. coli* in ninety minutes, *B. diphtheriae* in twenty minutes, *B. mallei* in in ten minutes, *B. pyocyaneus* in forty minutes, *B. dysenteriae* and *staphylococcus albus* grew up to two hours, and *staphylococcus pyogenes anrens* and *B. typhosus* were killed in ninety minutes. Ten per cent formalin (containing 37.2 per cent. aldehyde) killed all the nonsporebearing organisms tested in less than ten minutes, except *B. dysenteriae* and *staphylococcus pyogenes anrenes*, which were killed after ten minutes.

Feces exposed to 10 per cent. formalin solution were rendered practically sterile immediately; a few colonies developed in ten minutes. The spore-bearing organisms were destroyed after forty minutes.

A 10 per cent solution of formalin completely deodorized feces at once. A 3 and 5 per cent. solution renders them almost odorless after a very few minutes exposure.

On account of its germicidal efficiency and deodorized action formalin would seem to be one of the most useful agents for the disinfection of infected human discharges when used in a 10 per cent dilution, allowing an exposure of one hour after thorough mixing.

Tubercle bacilli in tuberculous sputum were killed after an exposure to 5 per cent. formalin for sixty minutes. Sputum exposed for fifteen, thirty, and forty-five minutes, respectively, still contained live virulent tubercle bacilli.

When tetanus toxine is exposed to 5 per cent. formalin for six hours a guinea pig is able to withstand 100 MLD of this formalinized toxine. Three per cent. formalin after twenty-four hours exposure protects against the toxine; it destroys a part of the toxine in one hour, its action increasing with the length of exposure.

Diphtheria toxine is more susceptible than tetanus toxine, as 4 per cent formalin, after six hours exposure protects a guinea pig against acute death; paralysis, however, is not prevented. One per cent., after twenty-four hours exposure, has the same effect. Its action against the toxine increases with the length of exposure.

This action of formalin on toxine is an important property in its use as a disinfectant, for not only are the bacteria themselves destroyed, but their soluble products as well.

The First Meeting of the Southern Medical Association.

The first annual meeting of the Southern Medical Association, the Southern and Gulf Branch of the American Medical Association met in the rooms of the Jefferson County Medical Society at the City Hall in this city at 11 a. m. Sept. 24th ult. A fair attendance of doctors from the states of Alabama, Georgia, Louisiana, Mississippi and Tennessee were present.

The President, Dr. H. H. Martin, of Savannah, Ga., not having arrived, the first session was presided over by Vice-president, Dr. Mack Rogers, of Birmingham. Appropriate addresses of welcome were delivered by Alderman J. R. Copeland, representing the mayor of Birmingham, Secretary Joseph B. Babb, of the Commercial Club of Birmingham, and Dr. B. L. Wyman, President of the Jefferson County Medical Society. Dr. Jere L. Crook of Jackson, Tenn., responded very beautifully on behalf of the Association.

The Association is composed of three sections, medicine, surgery and ophthalmology. Most interesting programs for each section had been arranged, and very interesting papers were read in each section. The

scientific meetings of the sections on medicine and surgery were held together, alternating with a paper from each section. We give our readers a few of the papers in this issue of the Journal, and hope to give others later as our space permits.

The social features of the meeting were by no means insignificant, and were apparently enjoyed to the fullest degree by the visiting doctors. A delightful social program had been arranged by the committee of local physicians with Dr. W. P. McAdory as chairman. It comprised a smoker at the Hillman Hotel on Tuesday evening, the 24th, a barbecue at the Country Club, followed by a trolley ride over the city and district, ending in a visit to the steel plant at Ensley, on Wednesday, the 25th.

The address of the President, Dr. H. H. Martin, was the feature of the session Wednesday evening. On Thursday the constitution was adopted, the report of the councilors was made, and the officers for the ensuing year were elected. The officers elected are as follows: President, Dr. B. L. Wyman of Birmingham, Ala.; Vice-president, Dr. W. P. McAdory of Birmingham, for Alabama; Dr. H. M. Fowlkes, of Biloxi, for Mississippi; Dr. Frank Watson of New Orleans, for Louisiana; Dr. G. R. Holden of Jacksonville, for Florida; Dr. R. Wallace of Chattanooga, for Tennessee; and Dr. A. L. Fowler of Atlanta, for Georgia; Secretary-Treasurer, Dr. Oscar Dowling of Shreveport, La.; Sectional Officers—Medicine, Dr. Seale Harris, Mobile, Ala. Chairman; Dr. H. E. Mitchell, Birmingham, Ala, Secretary; Surgery—Dr. W. F. Westmoreland, Atlanta, Ga., Chairman; Dr. Jere L. Crook, Jackson, Tenn., Secretary; Ophthalmology—Dr. J. F. Herron, Jackson, Tenn., Chairman, and Dr. A. B. Harris, Birmingham, Ala., Secretary.

President Wyman announced the appointment of Dr. W. W. Butterworth as councilor for Louisiana and will name the councilor for Florida later.

The councilors who hold over are: Dr. George C. Savage, Nashville, Tenn.; Dr. D. F. Talley, Birmingham, Ala.; Dr. Michael Hoke, Atlanta, Ga.; and Dr. W. W. Crawford, Hattiesburg, Miss.

Atlanta, Ga., was selected as the place of meeting for next year, which will be the second Tuesday in November, 1908.

The unqualified success of this, the first meeting of the Association was very gratifying to the members, and they look forward to great future usefulness of the Association.

The Opening of the Fourteenth Annual Session of the Birmingham Medical College and College of Pharmacy.

On Wednesday, October 2nd, the fourteenth annual session of the Birmingham Medical College and College of Pharmacy was opened in the main lecture hall of the college. There were present, besides the faculty and a large number of students, a number of citizens and friends of the college. Rev. L. S. Handley, D. D., opened with prayer, after which an address of welcome was delivered by Dr. L. C. Morris of the faculty. Dr. Morris then introduced Prof. J. H. Phillips, LL. D., Superintendent of Public Schools of Birmingham, who delivered a most eloquent address. Short addresses were also made by Prof. I. W. McAdory, Superintendent of Education of Jefferson county, and Mr. Job Going, member of the Board of Revenue of Jefferson county, and member of Board of Directors of Hillman Hospital. Prof. E. P. Hogan, secretary of the faculty, then made the announcements.

Thus was ended the most auspicious opening of what promises to be the most successful year in the history of the college. The enrollment of students is large, a considerable increase over any previous year.

The faculty and friends of the institution are proud of the fact that the committee appointed by the Council on Medical Education of the American Medical Association in its report rated this college in the first class of medical colleges of the United States.

Meeting of the State Board of Medical Examiners.

The State Board of Medical Examiners held their first meeting since the new law abolishing county boards of examiners and establishing one State Board went into effect in Montgomery on October 1st. There were seventeen applicants for examination to practice medicine in the State who appeared before the Board and stood the examination. The Board will hold at least two meetings for making examinations during each year.

The same Board acting in the capacity of the State Board of Health held a meeting also at the same time. Desirous of enlarging the work of looking after the health of the people of the State in limiting the spread of infectious and contagious diseases, and also of securing bet-

ter results in the registration and tabulation of vital, mortuary and morbidity statistics the Board passed the resolutions below. We sincerely hope that the governor will grant the request of the Board, so that it may not be handicapped in its great work for lack of sufficient office and laboratory room, now that sufficient funds were appropriated by the last legislature to do this work:

"1. Be it resolved, That in order to promote in the broadest and most practical way the sanitary interests of the people of the State, and to limit the spread of some of the most common and fatal of the preventable diseases, it is indispensable that work be undertaken in directions hitherto impossible on account of the meagerness of the appropriation formerly made for the use of the State Board of Health.

"2. Be it further resolved, That inasmuch as the present appropriation admits of undertaking this broader and more fruitful work, a larger force in the office of the State Board of Health is imperatively demanded, the additional officials needed being a pathologist and bacteriologist, a registrar of vital and mortuary statistics and possibly an increase of clerical force.

"3. Be it further resolved, That in order to render it possible to undertake this broader work considerable increase of office space for the State Board of Health is urgently needed—a room for a microscopical laboratory and one in which the registration and tabulation of vital mortuary and morbidity statistics can be properly carried on being the chief need.

"4. Be it further resolved, That a copy of these resolutions be conveyed to Governor Comer, with the request that he will give them such consideration as he deems proper."

Personal Notes.

Dr. T. D. Parke has returned from a few weeks stay in New York.

Dr. R. L. Hughes of Choccolocco, was in Birmingham on Oct. 1st inst.

Dr. B. L. Wyman has returned to Birmingham after two weeks visit to eastern cities.

Dr. E. H. Sholl and wife have returned from a month's delightful stay with relatives in the East.

Dr. L. G. McCollum of Birmingham, visited relatives and friends in Marion, Greensboro and other south Alabama towns during the past month.

Dr. James S. McLester, 830 South Twentieth St., Birmingham, wishes to announce that he will be absent from his office for purposes of study October 1, 1907, to October 1, 1908.

Dr. H. S. Ward of this city, left some time ago for a few months stay in Baltimore at the Johns Hopkins, after which he will spend some months in the medical centers of Europe.

Dr. B. D. Sibley announces that he has moved his offices to the second floor of the First National Bank Building, rooms 227 and 228, where he will continue the practice of eye, ear, nose and throat work.

Dr. W. H. Wilder of Birmingham, attended the meeting of the Frisco System Medical Association in St. Louis on the 24th ult., of which he was the president. After the meeting the Doctor spent a couple of weeks at the Mayo Clinic in Rochester, Minn.

Dr. James S. McLester left on the third inst. for Europe. He will spend six months in the laboratory of Prof. Emil Fisher in Berlin studying physiological chemistry. He will then spend some time in Munich with Prof. Müller. He has promised to write an occasional letter for the Journal during his absence.

Dr. Geo. T. McWhorter of Rivertown, Ala., visited this city on the first. Dr. McWhorter was President of the State Medical Association 1906-'07, and is the State Senator from his district. It was largely through his efforts that the bills establishing a tuberculosis sanatorium and an epileptic colony were passed by the last legislature. To him also we are largely indebted for the passage of the bills improving our medical laws and increasing the county health officer's salaries.

Book Notices.

Obstetrics: A Text-Book For The Use of Students And Practitioners.

By J. Whiteridge Williams, Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-chief to the Johns Hopkins Hospital; Gynecologist to the Union Protestant Infirmary, Baltimore, Md. Second enlarged and revised edition, with sixteen plates and six hundred and sixty-six illustrations in the text. New York and London. D. Appleton and Company, 1908. Cloth. Price \$6.00 net.

The popularity of Williams' "Obstetrics" is shown by the demand of a second edition after the exhaustion of the first, of which there were 17,500 copies printed. The second edition is printed from new plates, the book having been entirely reset. It is somewhat larger than the former edition. Many of the old illustrations have been replaced and a number of new ones added.

The chapters on the Development of the Ovum and the Toxaemias of Pregnancy were entirely rewritten. Sections have been added on the Metabolism of Normal Pregnancy, Vaginal Caesarian Section, Pubiotomy, and Contractions of the Pelvic Outlet.

No words of commendation are needed for this revised edition to those who have studied and are familiar with the first.

Human Anatomy, Including Structure And Development And Practical

Considerations. By Thomas Dwight, M. D., LL. D., Parkman Professor of Anatomy in Harvard University; J. Playfair McMurrich, Ph. D., Prof. of Anatomy in the University of Michigan; Carl A. Hamann, M. D., Professor of Anatomy in Western Reserve University; George A. Piersol, M. D., Sc. D., Professor of Anatomy in the University of Pennsylvania; and J. William White, M. D., Ph. D., LL. D., John Rhae Barton Professor of Surgery in the University of Pennsylvania, with 1734 illustrations of which 1522 are original and largely from dissections by John C. Heisler, M. D., Professor of Anatomy in the Medico-Chirurgical College. Edited by George A. Piersol. Philadelphia and London, 1907. J. B. Lippincott Company. Price, \$7.50. Pages, 2088.

This issue of this, the first entirely American anatomy in both text and illustrations, marks an important event in American medicine and medical publishing. It is the product of American authors exclusively. It is not a copy of Gray, re-written and re-illustrated, but is entirely original in its descriptive matter, its arrangement and its illustrations for which original dissections were made throughout. Being the first all American anatomy, it is of special interest to Americans, and will, we are sure, have a large sale. It is a great work and we heartily commend it. It is doubtful if any work heretofore has had expended upon it the amount of labor and money involved in the production of this magnificent volume.

The Diagnosis And Treatment of Diseases of Women. By Harry Sturgeon Crossen, M. D., Clinical Professor of Gynecology, Washington University; Gynecologist to Washington University Hospital and Chief of the Gynecological Clinic; Associate Gynecologist, St. Louis Mullanphy Hospital; Consulting Gynecologist to Bethesda Hospital, St. Louis Female Hospital and St. Louis City Hospital; formerly Superintendent of the St. Louis Female Hospital; Fellow of the American Association of Obstetricians and Gynecologists; Ex-President of St. Louis Obstetrical and Gynecological Society; Member American Medical Association, Mo. State Medical Association, St. Louis Medical Society, etc. With seven hundred illustrations. C. V. Mosby Medical Book and Pub. Co., St. Louis, 1907. Pages, 799.

As the title indicates, this work is devoted exclusively to the diagnosis and treatment of diseases of women, no space is taken up with etiology, pathology or major operative technique, except as necessary to make the work useful in the lines indicated. The necessary facts of diagnosis and treatment are given clearly and systematically so as to be readily understood and retained in the mind for use at the bedside.

The illustrations are good and were gathered from a wide range of the best works. The author has added over two hundred and twenty illustrations of his own. The book will be of help to those desiring a clear, practical work on diagnosis and treatment.

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to Students and Practitioners. By Leading Members of the Medical Profession throughout the world. Edited by W. L. Longcope, M. D., Philadelphia. Vol. III. Seventeenth series, 1907. Philadelphia and London. J. B. Lippincott Company. \$3.00.

This volume of this series is up to the standard, which is saying a great deal. It contains an article on Dietetics by Edsall; one on Treatment of Pneumonia by Robin; Mechanotherapy; by Wainwright; and Curability of Tuberculosis by Bullock.

Wallace discusses Renal Disease; Sweet, Surgery of the Blood Vessels, and Vaughan, Inflammation of the Gall Bladder and Gall Ducts. Other splendid articles on the various branches make it a most excellent volume.

Routgen Rays And Electro-Therapeutics, With chapters on Radium and Phototherapy. By Mihran Krikor Kassabian, M. D., Director of the Routgen Ray Laboratory of Philadelphia Hospital; formerly in charge of the Routgen Ray Laboratory and Instructor in Electro-Therapeutics in Medico-Chirurgical Hospital and College; Member of The Philadelphia County Medical Society; Pennsylvania State Medical Society; American Medical Association; American Routgen Ray Society; Vice-President of the American Physico-Electro-Therapeutic Association; New York Medico-Legal Society, etc. Philadelphia and London, 1907. J. B. Lippincott Company. Cloth, \$3.50. Half leather, \$4.00.

This is the latest volume in Lippincott's New Medical Series, edited by Francis R. Packard, M. D., having just come from the press, the latest on this subject and perhaps the best. The author presents clearly and concisely the more important facts pertaining to electro-therapeutics and the Routgen rays. He gives in a condensed but comprehensive manner the theories and applications of electrical energy, in its various forms, to the domain of medicine. It is an interesting and useful work, especially to those interested in this line of study and work.

Practical Gynecology. A Comprehensive Text-Book for Students and Physicians. By E. E. Montgomery, M. D., LL. D., Prof. of Gynecology, Jefferson Medical College; Gynecologist to the Jefferson Medical College and St. Joseph's Hospitals; Consulting Gynecologist to The Philadelphia Lying In Charity and the Kensington Hospital for Women. Third revised edition, with 574 illustrations, the greater number of which have been drawn and engraved specially for this work, for the most part from original sources. P. Blakiston's Son & Co., Philadelphia, 1907. Price, \$5.00 net.

The popularity and success of this book is shown by the demand for this the third edition. For this edition the author has carefully revised the book and has added some seventy pages of new material. The subjects of microscopic diagnosis, gynecic bacteriology, and the pathology of carcinoma uteri have been re-written. Those of etiology and blood examination have been added. As there is much new along the lines of bacteriological and pathological study, this brings the book to the front and up to date, and purchasers will not be disappointed in the work.

THE THERAPEUTIC VALUE OF APOMORPHINAE HYDRO-CHLORIDUM.

Eugène L. Fisk of New York, urges the use of apomorphine for its expectorant properties. He finds it efficient and harmless, even in relatively large doses, when taken by the mouth. When given by mouth its effects are widely different from those obtained by hypodermic use of the drug. Hypodermically it is a most valuable centric emetic in doses of from one-twentieth to one-sixtieth of a grain, acting quickly and gently. The possibility of depressing effects should be borne in mind when it is given to children, and strychnine should be combined with it. By mouth it has little emetic effect, but acts as an efficient expectorant in doses of one-eighth of a grain every two hours. It does not increase the effect of other narcotics. It should not be used when there is abundant expectoration. Crystalline apomorphine is to be specified, since the amorphous form is uncertain in its effects—*Medical Record*, September 28, 1907.

Miscellaneous Notes.

DR. STEPHEN L. STRICKLER OF BOGGSTOWN, INDIANA. FAVORABLY COMMENTS ON THE ACTION OF CACTINA PILLETS AS FOLLOWS:

"I have used Cactina Pillets for ten years and can say they are more to be relied on than most anything in medicine that I use. They surely must be made of the drug gathered at the most favorable time of the year, because the Cactus you buy on the market is not reliable." Cactina Pillets have been on the market for twenty years and testimony of this kind has been heaped upon it by the medical profession. It is being employed with benefit in functional cardiac and circulatory disturbances and exhibits no cumulative action.

NOSE AND THROAT.

For use in the nose, mouth and throat an antiseptic must combine strong germicidal power with absolute non-toxicity. Tyree's Antiseptic Powder fulfills these requirements. It may be used with complete safety as a mouth wash and for spraying the nose and throat. Its power to destroy bacteria that infest these passages is shown in its action in retarding dental cavities and the destruction of the *Bacillus Oculi Lactici*. As was to be expected, Tyree's Antiseptic Powder has imitations. Only worthless articles escape the schemes of counterfeiters. It is important to use only the genuine, therefore, insist always upon obtaining original packages. Two ounces, 25c. Eight ounces, \$1.00. Literature and a sample on request. Address all communications to J. S. Tyree, Chemist, Washington, D. C.

EXCERPT

From Address by Dr. Solomon Solis-Cohen, Philadelphia,
Chairman of the Delegation from the section on Pharmacology and
Therapeutics of the American Medical Association to the Meeting
of the American Pharmaceutical Association.

"For the last few years pharmacists and physicians working hand in hand, have set themselves to change some of their mutual errors and mistakes of the past. It lies not in the mouth of the physician to re-

proach the pharmacist nor in the mouth of the pharmacist to reproach the physician. We have erred mutually, we have erred together, and we are determined to redeem ourselves together. The mere trade in patent medicines, in frauds and fakes, the deceits of all kinds, need not concern us. There are crimes outside of the ranks of medicine and outside of the ranks of pharmacy and we are not starting off on a general reform expedition. There are other organizations and other agencies for that purpose, but the movement to make the drugs—whether the product of the manufacturing houses or the product of the individual pharmacist—which are dispensed over the counter, upon our prescriptions, what they purport to be is one in which you and we have a common interest, and in which our patients have the greatest interest of all. I recognize and you recognize—we must recognize—that in the general progress of science and the general advance of discovery, and the general progress of the arts of manufacturing and preparation of crude pharmaceuticals there is abundant room for large manufacturing houses which devote themselves to specialties of various kinds.

Manufacturing Pharmacy.

For example, how can the individual pharmacist undertake to prepare and supply the great group of animal extracts and serums, which now have such a large part in the therapeutics of today? And so even with various galenicals, alkaloids and the like. There are many things which the retail pharmacist cannot do as well as that establishment which possesses the proper facilities and which is thoroughly organized to do well on a large scale what can only be done imperfectly on a small scale. We all recognize that, and the American Medical Association has taken steps, to place themselves in proper relation with the great manufacturing houses, which are a credit to American Pharmacy and to American business. We want to have the most cordial relations with them, so that those firms may be encouraged to prepare and offer to us for the benefit of our patients the best and purest and most definite pharmaceutical products. And yet, after all, there is a place, and there must be a place always for the individual pharmacist—the retail druggist, call him by whatever name you please; for the individual who practices as a scientific man the profession of pharmacy.”

MIXED BROMIDES.

Dr. Robt. J. Preston, Brown-Sequard, Hazard and other learned men of the profession have strongly advocated a combination of bromide salts in preference to the use of potassium bromide alone. The salts of the lighter metals, as sodium, ammonium and lithium, seem to have less of the untoward action than the potassium salt. In Peacock's Bromides we have a union of these salts that has proven itself a most available and trustworthy combination. In this regard we are pleased to quote Dr. Caldwell, who says: "It is a mystery to me why bromide of potassium is so generally used by the profession. Its action is not near as reliable as the bromide of sodium, but better still is a combination of bromides. For such a preparation I use Peacock's Bromides, as I know it is made of the purest salts, and the difference between its therapeutic action and that of the commercial salts is very great. I have used it for years and it is always reliable and staple. It is impossible to obtain satisfactory results in prescribing bromide of potassium, and thus I have depended upon this preparation. I have also learned that it is necessary to see that my prescription for it be filled at a first-class pharmacy."

ELONGATION OF THE UVULA.

As a gargle in sore throat or elongation of the uvula, Kennedy's Dark Pinus Canadensis has very general endorsement, the usual proportion being teaspoonful to glass of water.

SLEEPLESSNESS.

Nothing is more destructive to physical health, or more conductive to mental distress, than insomnia. Unless the patient is permitted to sleep, the nervous system becomes unstrung and uncontrollable, and medicines that are ordinarily efficacious lose their value. The first requisite in such cases is a remedy that will induce calmness and refreshing rest. Daniel's Conct. Tinct. Passiflora Incarnata, fulfills this requirement, and, besides giving natural slumber, cause a relaxation of the nervous system and a building up of all the body tissues.

Daniel's Conct. Tinct. Passiflora Incarnata, is a nerve sedative and tonic. Its action is directed against the garglia, so that it may be used

with great advantage in all nervous diseases. It relieves the tension to which the nerves are subjected, gives relaxation to the patient, and places him in a condition sound and natural. Its tonic properties are most beneficial, being an invaluable aid in convalescence.

THE NECESSITY FOR HEMATICS AFTER MISCARRIAGES.

The more one studies the pathological conditions which follow premature expulsion of a fetus, the more evident it becomes that changes and complications which result from such unnatural termination of a natural process, are little appreciated. There can be little wonder, therefore, that abortions and miscarriages so often give rise to countless female ills, and so frequently lead to lives of more or less chronic invalidism.

Take, for instance, the average case. The whole female organism, as soon as conception takes place, makes preparations to meet the growing demands of the impregnated ovum. The vital processes of both nutrition and elimination are more heavily taxed, and this, of course, means greater activity on the part of the nervous and circulatory system. Under normal conditions, however, since the female organism is especially designed for the one great purpose, maternity, there is only modification or increase of function throughout the body. Thus in every sense, in spite of its many complex details, normal pregnancy is purely physiological.

But if for any reason pregnancy is abruptly terminated before the time at which it would normally end, the condition becomes distinctly pathological. Delicate structures, especially those of the generative organs, are suddenly arrested while in a stage of active development, and a retrograde process has to be prematurely established. There naturally follows a marked depression of the whole nervous system, because of its unprepared state for meeting an event unexpected and unnatural. More important than all, however, is the fact that certain growing tissues that would separate normally at the end of pregnancy, in early stages are so closely attached to the uterine wall, that premature delivery always means tearing them away, leaving fagged, lacerated surfaces and an inevitable retention of tissue that because it has no further purpose must be either thrown off or absorbed by the organism. The extreme liability to infection at this time is well-known, and is directly due to the predisposition which attends this invariable presence of dead or dying tissues.

From the foregoing, it must be apparent, that the effect of every miscarriage is depressing in character. Every organ cannot fail to feel the pernicious imprint, and there is a logical falling off of every vital process. Because of the formation and absorption of ptomaines and toxins of varying degrees of virulence, there is always more or less vitiation of the blood and disintegration of its corpuscular elements. While the hemolysis may not be extreme, it is generally sufficiently marked to leave no doubt that it is a prominent factor in determining the duration of convalescence and the completeness of recovery.

In regard to treatment it seems hardly necessary to speak of the importance of thorough antisepsis nor of the frequent necessity of removing decaying material. These things are well appreciated by physicians generally. But what should be emphasized is the great importance of vigorous reconstructive treatment after miscarriages, in order to hasten the restoration of normal conditions, with all that this may mean on a woman's whole future health.

Clinical experience has shown that Pepto-Mangan (Gude) has an especial value in these cases, for it not only supplies the urgent needs of the blood, but directly promotes the elimination of ptomaines through the natural channels. The phagocytic process is stimulated, and as a supply of good active blood is produced, the uterus and related organs are vastly helped in their effort to return to normal conditions. Digestion and assimilation are aided and the general vitality reinforced to a marked degree.

In a word, Pepto-Mangan (Gude) is an unsurpassed tonic wherever there is a lowering of blood quality, from no matter what cause, and the definite positive benefits which follow its administration leave no further recommendation necessary.

THE APOSTLE OF PURITY.

Dr. C. A. Bryce resents the imputation that the independent medical journals are controlled by their advertising patronage, and in a forceful editorial in the August number of *The Southern Clinic*, throws back the charge in the following vigorous language. He says: "Dr. Simmons, of the J. A. M. A., seems to harbor a peculiar dislike to antikamnia and its compounds, and in its write-up in his pamphlet, sent

gratuitously far and wide, he appeals pathetically to all physicians and journalists to leave the evil thing alone. He doesn't see how any self-respecting journalist can carry the advertisement of antikamnia, nor how any physician 'with a particle of self-respect or manhood' can continue to support any such journal.

"*The Southern Clinic* carries the advertisement of antikamnia and carries a large and influential list of subscribers—men who are neither renegades, proselytes nor ringsters—men who are, to say the least, as honorable, self-respecting, and truthful as this Apostle of Purity who seesaws like a supple-jack between truth and policy. We carry the antikamnia advertisement because we know from many years' experience that it will do just what we expect antikamnia to do. We know its effects, its dose, and that it is safe to administer in the doses we have proven. We have found it a valuable remedy, and as such, use it largely in a variety of diseases. We have never had any bad results from its use in larger or small doses in old or young. We therefore carry it as an advertisement and prescribe it in practice because we *know what we are doing*, and can confidently recommend it to our professional brethren. We presume they likewise, with all due respect for themselves and honesty of purpose, prescribe antikamnia and support the *Clinic* because they know that they are both good and honest productions. Moreover, as we are relying upon our own knowledge and responsibility, we prefer *our* opinion to that of the worthy Simmons."

DR. PETTEY'S EASTERN RETREAT.

Dr. Geo. E. Pettey of Memphis, Tenn., has associated himself with Dr. Wm. F. Ridgway of Atlantic City, N. J., and they have opened a Retreat at 3303 Pacific Avenue, Atlantic City, for the treatment of Alcohol and Drug Addictions by the methods introduced to the profession by Dr. Pettey. In announcing the opening of this eastern branch of his work Dr. Pettey says that some years ago he had Drug Habitues in his own clientele for whom he was unable to secure relief by any of the methods of treatment then in vogue. This led him to undertake a thorough study of the Narcotic Drug Addictions. Two years spent in that work, he says, enabled him to form definite conclusions as to the Pathology of these addictions. With that knowledge to

guide him a rational course of treatment was devised, every detail of which was published to the profession. See *Therapeutic Gazette*, Oct., 1901, and subsequent articles.

He says it was his hope that reputable institutions engaged in the treatment of this unfortunate class of sufferers would avail themselves of the benefits of his study of this subject, but thus far, few of them have done so. The majority seem to be still "Wedded to their Idol" the Gradual Reduction Method. In Dr. Pettey's judgment that method of treatment does not give this class of patients the relief to which they are entitled. Since others do not seem to be inclined to acknowledge the advantages of Dr. Pettey's method and to give their patients the benefits of it, he is undertaking to meet the demand for such a treatment in the eastern states by opening the Atlantic City Retreat.

Dr. Wm. Ridgway, who has assumed the Medical Directorship of the new institution is a graduate of Jefferson Medical College and holds positions of honor in the profession of this city. This, with Dr. Pettey's well established reputation, is a sufficient guarantee that the new institution will be conducted according to the most scientific principles and upon the highest ethical lines.

Those wishing further information should address The Dr. Pettey Retreat, 3303 Pacific Ave., Atlantic City, N. J., or Dr. Geo. E. Pettey, Memphis, Tenn.

VIN MARIANI NOT A COCAINE PREPARATION WILL NOT BE INTERFERED WITH BY THE HEALTH DEPARTMENT.

New York, Sept., 1907.

Dear Sir:—*The American Druggist*—August 19, 1907—in reply to a query, ERRONEOUSLY STATED that Vin Mariani is regarded by the Health Department of New York as a cocaine preparation, and can only be sold under restrictions of the anti-cocaine ordinance.

Upon our protest that this was a misstatement of fact, injurious to us and to the trade handling Vin Mariani, the publishers in investigating the source of their information submitted the question personally to Dr. Darlington, the Commissioner of Health, who promptly repudiated the statement as unauthorized. He further said that "Vin Mariani, under the new label adopted by the manufacturers, is not re-

garded as a cocaine preparation, and can therefore be sold as freely as any other medicated wine that does not contain cocaine."

In a retraction of their misstatement, the editor of *American Druggist*—August 26, 1907—referring to the status of Vin Mariani under the various state laws, sets forth the opinion of the New York Board, and concludes: "We have no doubt that the Health Departments of other cities throughout the country will be influenced by the judgment of the New York officials, and the precedent established by them will be followed generally."

There is therefore no reason whatever why Vin Mariani under this new label should not be freely sold in this city, as such sale is ABSOLUTELY LEGAL.

Very respectfully,

Mariani & Co.

HOME-MADE BUTTERMILK.

It is now within the power of every household to have an abundance of that refreshing and healthful summer (also winter) drink—buttermilk. To the present time no one knew of any source of buttermilk except from the butter-maker; but now-a-days the butter-maker does his work so well that the buttermilk is entirely deprived of the delicious little grains of fat which add so much to its food qualities as well as to taste. True buttermilk, made direct from fresh rich milk, within a few hours, of the finest flavor and taste, nutritious and more excellent than the article as originally known, can now be prepared in any kitchen. This is done by taking a quart of fresh, rich milk, adding a pinch of salt and about a half-pint of hot water to raise the temperature to body heat, and lastly adding a tablet which contains a pure culture of lactic acid bacteria. Place all in a pitcher, cover with a napkin, and let stand for twenty to twenty-four hours at the ordinary temperature, and there is your perfect buttermilk. The tablets are made by Parke, Davis & Co., the pharmaceutical and chemical manufacturers of Detroit, Michigan, and are called "Lactone" or buttermilk tablets.

On the farm, in the process of buttermaking the cream is allowed to sour spontaneously and is then churned. The souring is the lactic acid fermentation caused by lactic acid bacteria or ferments. The difference between the new and old process is one of method and not result. In the old, the lactic fermentation is waited for and expected to occur

spontaneously, with disappointment sometimes. In the new, the ferment in pure culture is directly planted in the milk, and the desired fermentation is secured without fail. In Bible days, spontaneous fermentation of dough was depended upon to leaven or lighten bread, and failure frequently attended the process, the dough putrefying instead of fermenting, and was then lost. Finally, man learned to add yeast to the dough and not to depend upon spontaneous processes, with the result of always securing the right fermentation and making a better and more nutritious bread. This new buttermilk process is a like improvement.—*Monthly Bulletin Indiana State Board of Health*, June, 1907.

CANCER OF THE HEAD OF THE PANCREAS.

Dell B. Allen, New York, describes a case of cancer of the head of the pancreas. It was characterized as to clinical symptoms by constipation, attacks of acute pain, nausea, vomiting and anorexia. Pain occurred all over the abdomen and large quantities of gas and water were discharged from the stomach. No tumor was felt until shortly before death, when obstruction of the intestine occurred.—*Medical Record*, September 14, 1907.

THE RELATIONSHIP OF THE LIFE INSURANCE COMPANY TO THE APPLICANT SHOWING GLYCOSURIA.

T. Stuart Hart of New York, believes that injustice is sometimes done the man who is refused life insurance on account of the finding of sugar in the urine. The company should see that a careful and accurate diagnosis is made. The presence of slight glycosuria cannot be asserted on one test. The following tests should be applied to specimens in which there is any doubt of the presence of diabetes in the patient: Fehling's, phenylhydrazin, and fermentation followed by a second Fehling's test. Attempts to hide glycosuria by use of a diabetic diet may be detected by a test for acetone bodies. No true diabetic is a good risk for life insurance, but some cases of transient glycosuria may be perfectly good risks. Race, family history, occupation, age, and weight must all be considered in connection with the results of urinary examination.—*Medical Record*, September 28, 1907.